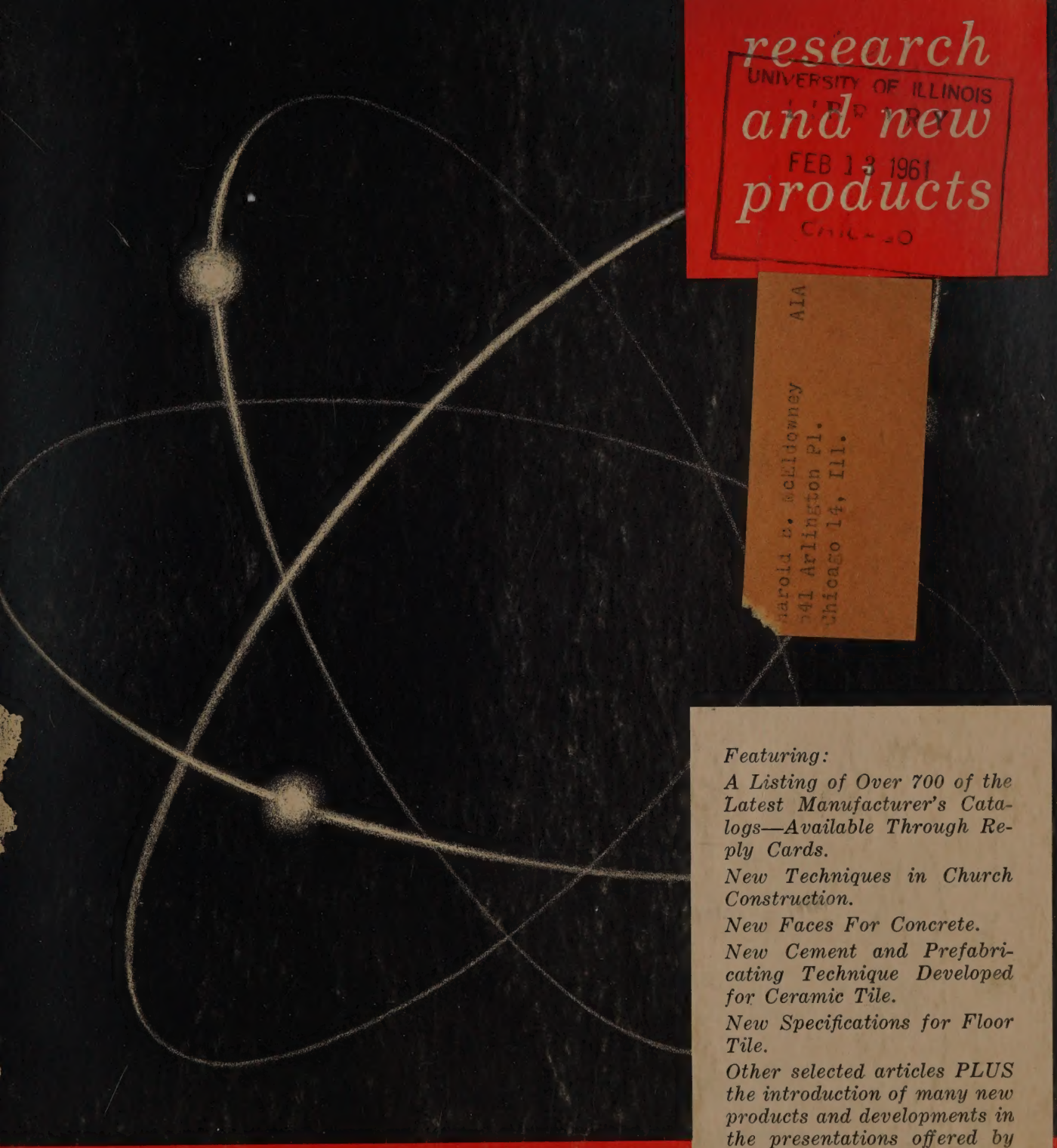

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UNIVERSITY OF ILLINOIS
FEB 13 1961
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TECHNICAL BULLETIN

83

a review of quality building materials

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March 1958

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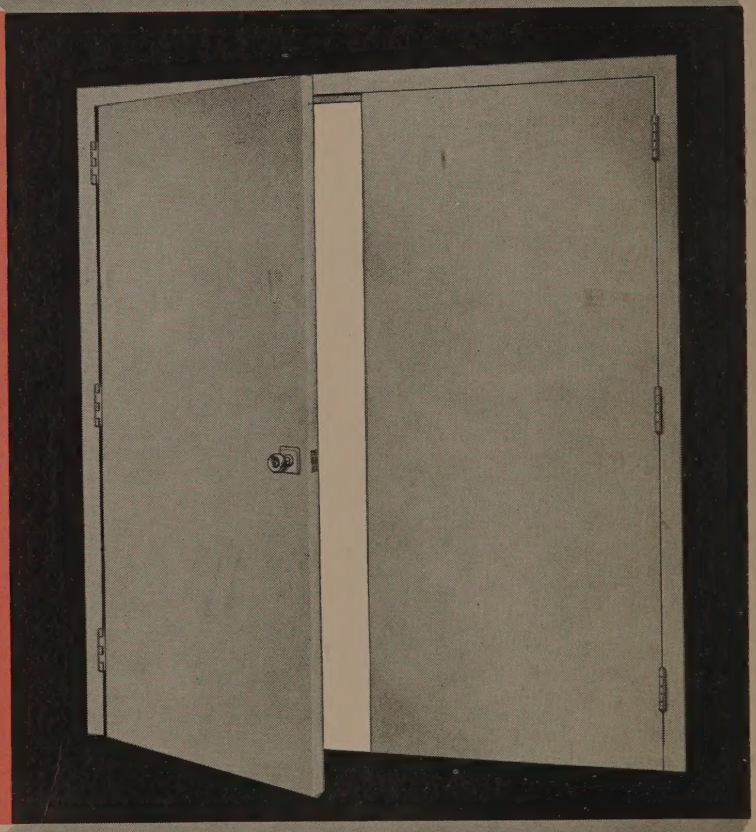

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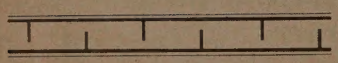
ANNOUNCING 2 NEW WHEELING

1. NEW BAR-Z SNAP-IN STUD SYSTEM

The new Wheeling Bar-Z Snap-In Stud System goes up faster... reduces installation costs. That's because the new Wheeling Snap-In Track eliminates the need for shoes and shoe-tying... allows installation of strong one-piece steel studs by merely snapping them into place. What's more, Wheeling's new system permits for staggered metal studs framed within the confines of a 4" track, thus assuring greater sound resistivity.

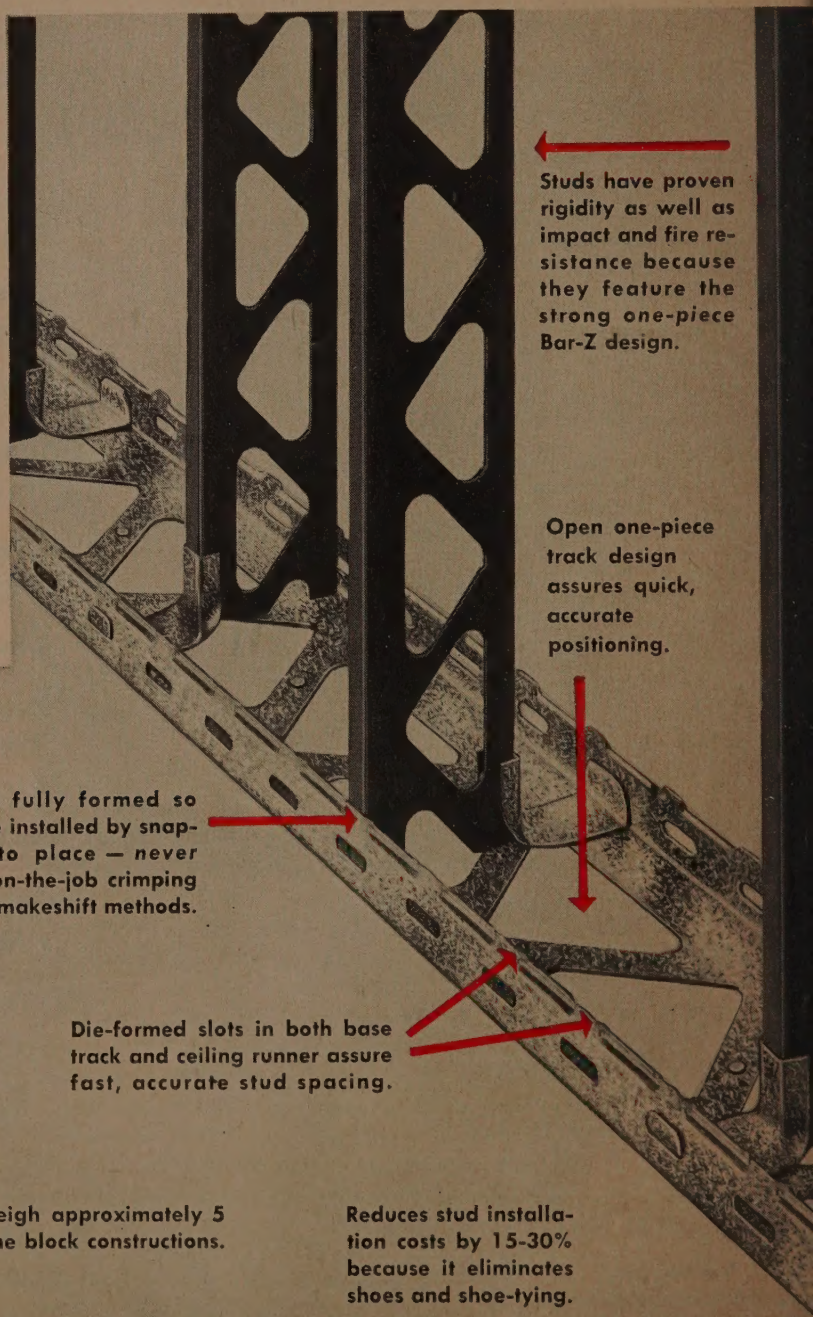
AVAILABLE FOR VARIETY OF WALL CONSTRUCTIONS!

This new system is available for the following overall wall thicknesses: 4" (2½" track), 4¾" (3¼" track), 5½" (4" track, 4" studs or 2½" staggered studs).



Allows staggered steel-stud acoustical system without sacrificing highly desirable 5½" overall wall thickness.

Wheeling Stagger Clip (patent applied for) provides easy and quick installation of the staggered stud system . . . as well as eliminates the need for special shoes or double tracks.



Studs have proven rigidity as well as impact and fire resistance because they feature the strong one-piece Bar-Z design.

Open one-piece track design assures quick, accurate positioning.

Track is fully formed so studs are installed by snapping into place — *never* require on-the-job crimping or other makeshift methods.

Die-formed slots in both base track and ceiling runner assure fast, accurate stud spacing.

Track, studs and lath weigh approximately 5 lbs./sq. ft. less than some block constructions.

Reduces stud installation costs by 15-30% because it eliminates shoes and shoe-tying.

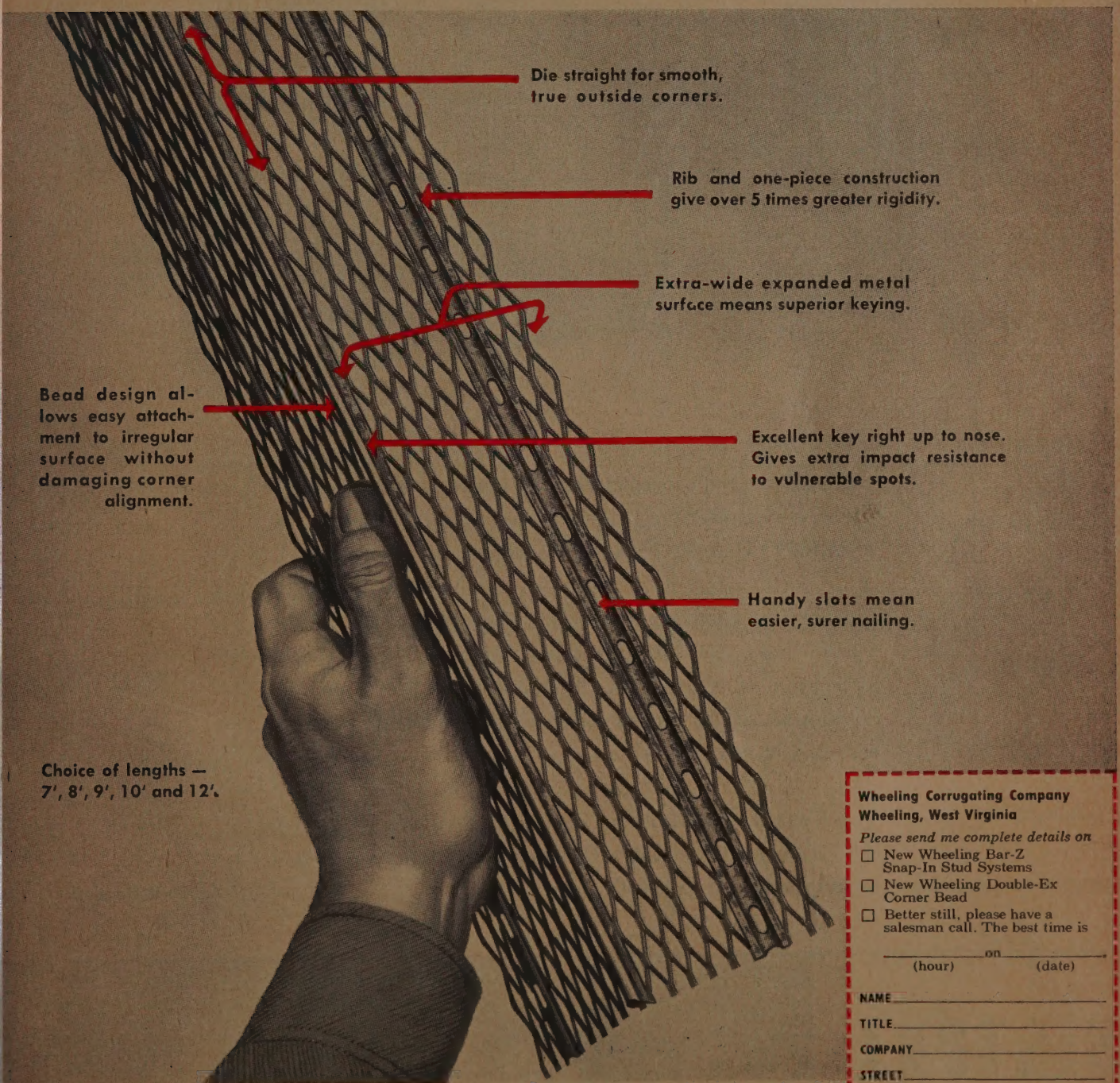
Wheeling CORRUGATING COMPANY

Both of these new Wheeling Lath products . . . plus the complete line of other Wheeling Lath and Accessory Items . . . are available from Wheeling warehouses in all of these cities: *Boston, Buffalo, Chicago, Columbus, Detroit, Kansas City, Louisville, Minneapolis, New Orleans, New York, Philadelphia, Richmond, St. Louis.* **Sales Offices at** *Atlanta, Houston.*

LATH PRODUCTS

2. NEW DOUBLE-EX CORNER BEAD

Wheeling's new Double-Ex Corner Bead has the *extra* rigidity, *extra* keying surface and *extra* features that plasterers have been asking for. Each wing includes a sturdy rib, which – combined with the one-piece construction – gives far superior rigidity. Look at all the important advantages Double-Ex offers you . . . and remember, *only Wheeling Double-Ex Corner Bead has them all.*


Die straight for smooth, true outside corners.
Rib and one-piece construction give over 5 times greater rigidity.
Extra-wide expanded metal surface means superior keying.
Bead design allows easy attachment to irregular surface without damaging corner alignment.
Excellent key right up to nose. Gives extra impact resistance to vulnerable spots.
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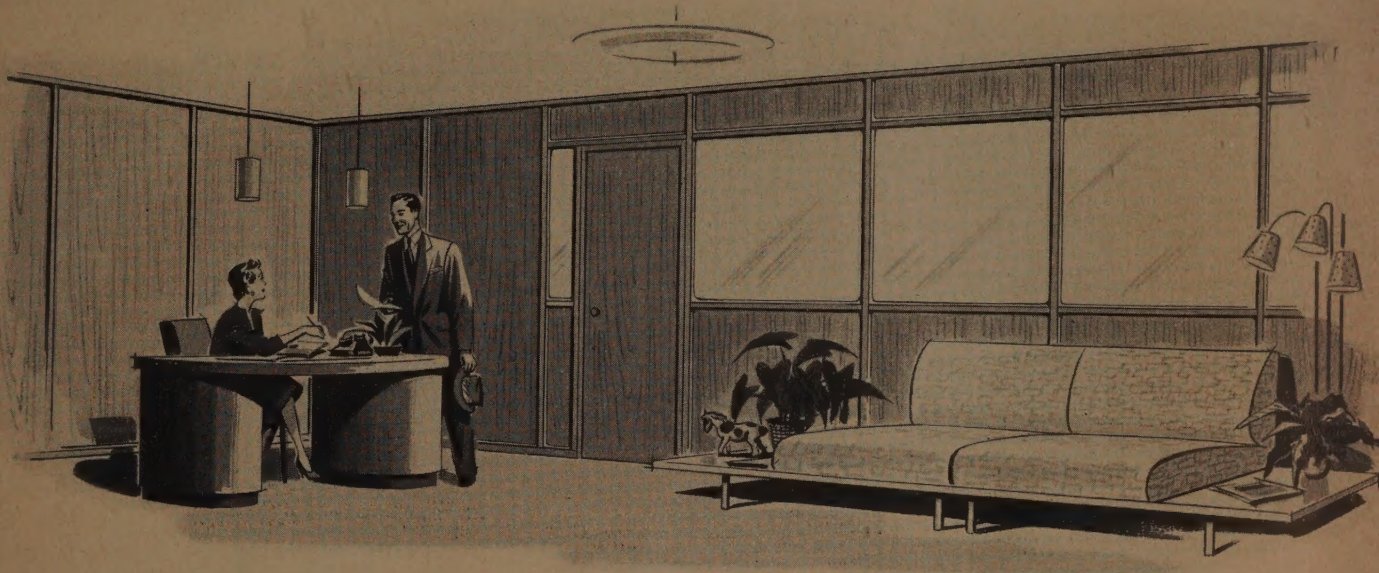
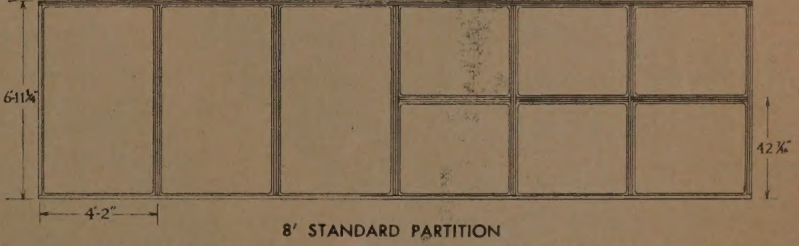


While COLORLINE is a truly low cost partition system, application of pre-engineering provides additional savings through maximum utilization of steel and panel material. The four "Standards" shown below will provide you these savings—wherever they can fulfill all or any part of your requirements.

7' STANDARD DOOR HEIGHT PARTITION

SOLID PANEL — PANEL AND GLASS



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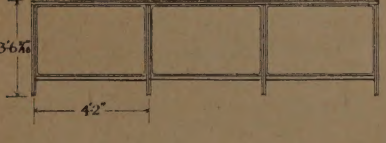
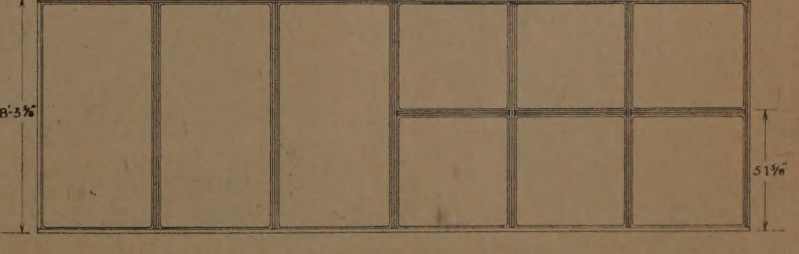


8' STANDARD PARTITION

SOLID PANEL — PANEL AND GLASS



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UNISTRUT PRODUCTS COMPANY

Photo: Photo-Art Commercial Studios

Warmth and simplicity characterize this church in which sweeping arches give feeling of strength as they blend into the natural wood ceiling. Flexibility of this type of arch has opened many possibilities in church design.

New Techniques In Church Construction

Development of practical fabricating techniques for glued laminated timbers provide a new structural element for modern church design.

by **West Coast Lumbermen's Association**

For many years industrial builders have recognized and utilized the superior ruggedness and fire durable qualities of heavy timber construction. Heavy wood post and beam frame supporting heavy plank or laminated wood floors and roof gave the building a shock absorbing stability necessary for mounting and supporting mill machinery. The easy working qualities of wood made for economical construction and provided the easy adaptability necessary in any progressive, changing mill operation. And in the event of fire, the thickness of the floors and roof acted as an effective fire stop, while the heavy cross section of the framing provided a fire durable support which permitted effective fire-fighting within the building without fear of immediate collapse.

The economy of construction, ease of alteration, and fire durability of heavy timber construction was also recognized and utilized by early church architects. Heavy roof spans, supported by massive wooden posts and heavy hewn or sawed timber trusses produced an interior of warmth and ruggedness compatible with the pioneering spirit of early America. But heavy posts and beams, and plank floor and roof could not be readily adapted to the smooth flowing lines and finished beauty demanded by modern church architecture. Other materials were utilized, and the warmth and simplicity of timber construction disappeared from many of the new church and school structures.

The development of practical fabricating techniques to economically produce glued laminated timbers of almost any size and shape has now provided a new structural element for the modern church architect. No longer limited by the size, strength and shape of solid timbers, the architect can let his dream become a design, confident that the finished glued laminated supporting frame for his structure will add to rather than limit the architectural effect he desires. Smooth, curved beams can now sweep in a continuous timber from floor line to roof peak. Flat or arched spans, providing clear assembly and sanctuary areas without interior intermediate supporting posts, are possible while retaining the simplicity, adaptability and durability of heavy timber construction.

Glued laminated timbers are fabricated from selected one or two inch stock glued face to face and bent layer by layer to the desired shape as they are clamped together to allow the glue to set. Modern glues with binding strength exceeding the fiber strength of the wood provide a permanent bond. Waterproof glues are also available for outside timbers exposed to the weather, or timbers subject to moisture in damp locations. After the glue has set, the exposed faces of the beam are machine-finished to close tolerances. Beams are wrapped in heavy waterproof paper for shipping. During the erection the paper wrapping is left on the beam as long as possible, to protect the natural beauty of the wood and provide a clean, smooth surface for staining or finishing.

The favorable fire loss record of heavy timber construction has been the result of several factors, one of which is the lack of any concealed spaces in joist channels or behind false ceilings. The heavy plank or laminated wood floor was laid directly on heavy beams, with the underside of the floor forming the ceiling of the area below. The appearance of the exposed surface of the heavy rough beams and planks was not objectionable in industrial occupancies; but to adapt industrial heavy timber construction to church and school occupancies, a ceiling or sheathing was necessary to provide a finished appearance. Now, special appearance grades of finished three- and four-inch thick flooring and roof decking is available. Now the floor or roof deck can be laid directly on the finished timbers without need of other sheathing or ceiling. The appearance grade heavy decking can be finished to bring out the natural warmth and beauty of the wood grain. Matching or contrasting finish can be applied to the supporting timbers to provide a warm and friendly meeting-room, or a canopy of simplicity and natural beauty over the sanctuary.

The finished decking is available in several designs, producing flat V-grooved or acoustical grooved designs on the under surface. The decking can be pre-drilled for lateral spiking so that each new piece can be securely spiked to the decking already laid. Double tongue and groove edges insure a perfect match. This forms a strong, continuous panel which needs no intermediate support between beams.

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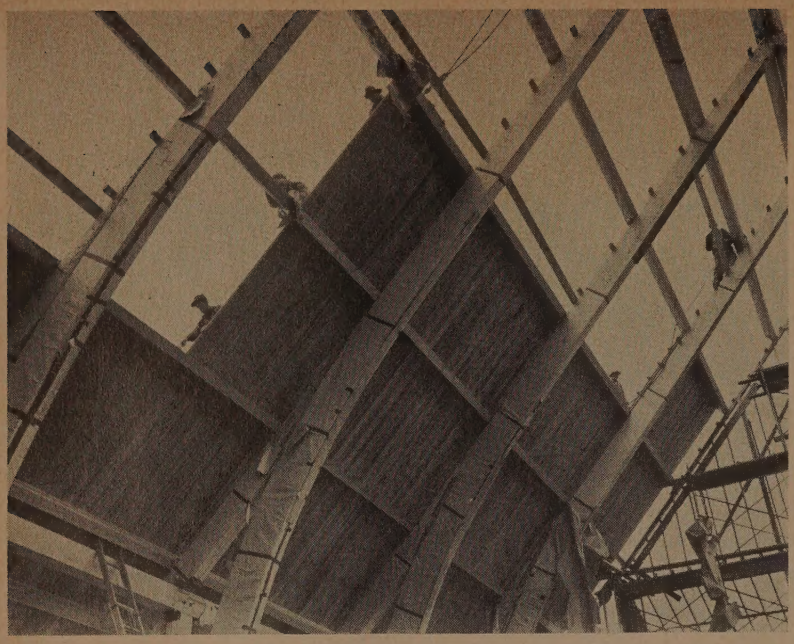
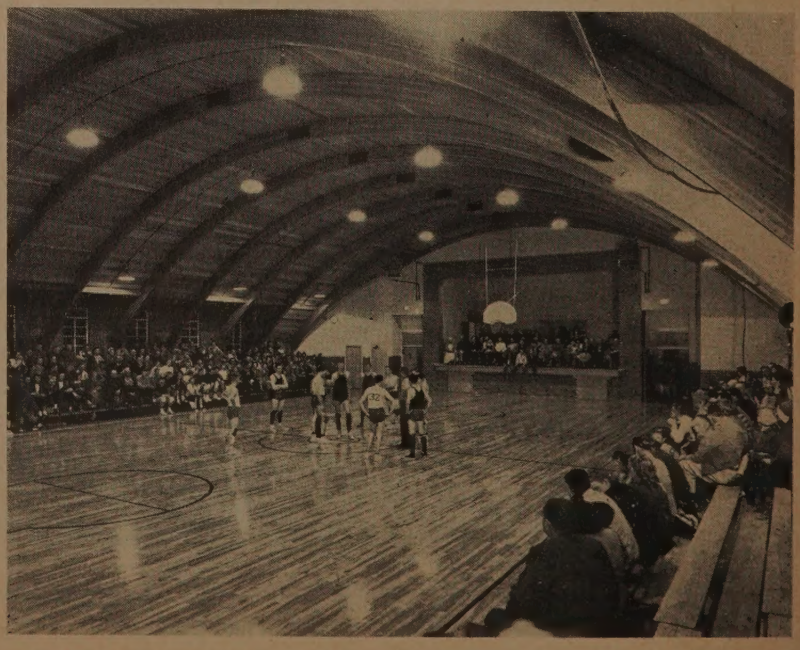


Laminated beams being used in construction of this church are wrapped in paper. Paper is left on beam as long as possible to protect the beauty of the wood and provide a clean surface for finishing.

Wood itself has inherent acoustical qualities, providing at the same time an enriching resonance and quiet, but not quenching absorption. Where additional sound diffusion is desired, acoustical grooved decking is available. The four-inch wooden roof decking provides a thermal insulation equivalent to the usual one inch roof deck and two inches of insulation. If additional insulation is desired in colder climates, one or two inches of insulation can be tacked or mopped on to the decking before the roofing is applied. To preserve the clean smooth appearance of the underside of the sanctuary or assembly room roof, extension outlet boxes are available so that electrical conduit for lighting outlets can be run on the top of the roof decking before the insulation and roof is applied.

The smooth beams and finished decking designs made possible by using glued-laminated timbers and appearance grade decking not only provide an easily finished interior, but also provide an easily maintained interior. Most building maintenance men are familiar with the care and refinishing of wood surfaces. Bulletin boards, room signs and similar equipment are easily installed or removed without special mounting devices. Minor alterations and repairs can be readily accomplished. Major additions or alterations are usually possible without unnecessary delay and without creating major interior dust storms which seep into all parts of the existing structure. The adaptability of "easy to work" wood makes the original economy of the structure a re-occurring advantage when changes become necessary.

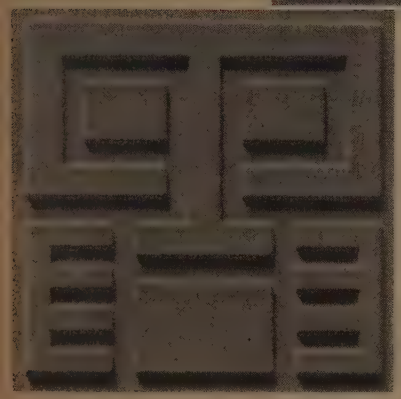
To quote an architect who specializes in church design, "You can develop designs as new as tomorrow; retaining the qualities of heavy timber construction. Ruggedness disguised in the smooth, sweeping symmetry of the timber arches. Warmth and friendliness of natural wood hiding the utility and durability of the heavy decking. Simplicity of erection is reflected in the simple beauty of the finished structure."



Curved laminated beam arches provide the supporting frame for this 70 x 80 foot school gymnasium. Roof decking has been laid directly on timbers eliminating need for additional ceiling cover.

New Faces For Concrete

by **The Portland Cement Association**



The glassy-smooth surface of concrete panels cast using plastic form liners produces brilliant effects in colored concrete. With proper care, the panels retain their gloss indefinitely.

Architects at the Centennial Convention of the AIA previewed at the Portland Cement Association exhibit a new decorative treatment for concrete—a precast panel formed with a plastic form liner. The beauty of its ultra-smooth surface and the design freedom it offered intrigued all. Concurrent with this development has come an announcement of the availability of rubber form liners in this country. The rubber liner produces surfaces with an overall rug-like texture.

Concrete is ideally suited to accept decorative treatments. These recently introduced form liners heighten and complement concrete's natural qualities meanwhile providing two more faces for this versatile material.

Plastic form liners are excellent for bold patterns. The stock from which they are made is finished smooth on one side and leather-grained on the other. Concrete cast against the plain surface takes on a gloss and smoothness heretofore not achieved. Colored concrete registers a purity of hue that is rich and pleasing. The textured side of the liner produces a leather-like surface appearance.

Rubber form liners with bold patterns have been used in Europe with success, but applications in the United States have been largely confined to smaller overall patterns. By setting rubber form liner panels with the lines of the design running in various directions, an attractive pattern can be obtained for large wall areas.

Since no form oil, bond breaker, cleandown or grinding are required, the cost of finishing is practically eliminated. These form liners are comparatively low in initial cost and reusable often if handled carefully, which further reduces the overall cost.

Plastic liners are custom-made to individual designs whereas rubber liners are available in a limited number of textures—plastic liners can be formed to patterns of any size up to 4 x 7 feet. Rubber liners are available in widths varying from 2 to 6 feet and in lengths up to 50 feet. The 3-foot width has usually proven to be the easiest to handle.

Plastic liner design can be anything the architect fancies but the following three rules should be observed to assure ease of stripping: (1) Limit depth of design to ½ inch, (2) maintain a 6-degree draft on all indentation sides, and (3) keep all edges and corners rounded. The relief may be more than ½ inch if depressed areas are sufficiently wide. If these suggestions are adopted, stripping will be quick and simple. Master molds from which the plastic liners are made can be from any of a number

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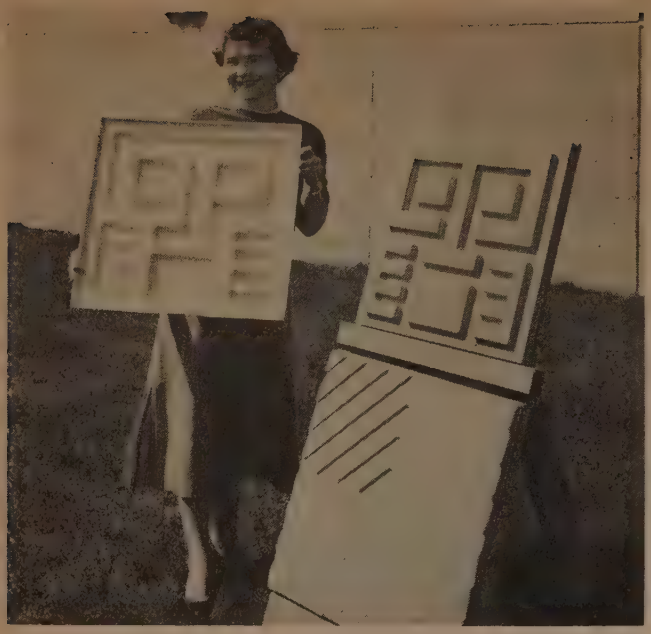


The girl is holding one of the new plastic liners, while at her left are two concrete panels cast using the liners.

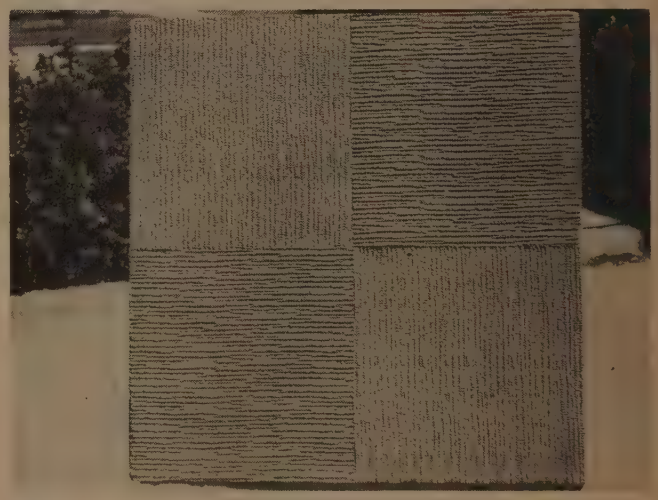
of materials, but wood and plaster are most frequently used.

Rubber liners have been used to date on both precast and cast-in-place work. Plastic form liners have been largely confined to horizontally cast panels and members. When used for vertical cast-in-place sections, particular care must be exercised to prevent formation of air pockets in the concrete at the surface of the liner.

Plastic liners can also be used for concrete masonry facings. A flat, glassy surface or a pattern may be used. Block with the same pattern can be set up in different manners to produce a wide variety of overall designs and effects.

The form liners present no special construction problems. Best results are obtained when air entrainment and properly graded aggregates are used, but no special ingredients or proportions are required. Lightweight aggregates will probably be used often to reduce the weight of precast units and provide enhanced insulating properties. Vibration should be thorough to assure uniform surfaces. No form oil should be used on either rubber or plastic liners. Treatment of the concrete every two to five years with a 4 to 5 per cent silicone solution will help protect the glossy finish attained with plastic liners. Concrete masonry facings and precast members can be cast horizontally without any backing for the liners. Small tacks or brads, staples, double-faced adhesive tape or rubber cement can be used to attach liners to the forms for cast-in-place work.

These form liners are easily maintained. Plastic liners should be washed with clear water and rubbed with a clean cloth after each use. Their useful life and performance are improved if they are kept moist when not in use. The only maintenance required for rubber liners is an occasional cleaning with a stiff fiber brush.



Rubber form liners produce an attractive textured surface for walls or ceiling.

Plastic form liners were used to cast these designs in columns for new laboratory buildings being constructed for the Portland Cement Association.

First application of plastic liners was for the precast columns of two new buildings the Portland Cement Association is erecting at its Skokie, Illinois, laboratory. Rubber liners were used for the tilt-up wall panels. A series of modernized American Indian designs for the columns were formed against the textured side of the plastic liners. Since the columns were precast on the ground, the simple construction cycle was to set the liners in the bottom of the forms, carefully place the concrete and cure for at least three days.

Practically any precast concrete unit—concrete block, tilt-up panels, precast frames, swimming pool copings, patio block—can be easily beautified through the use of these liners. In addition, rubber liners offer a new type of architectural treatment for cast-in-place ceilings and walls.

These new form liners are added reasons, together with shell roofs, tilt-up walls and prestressing, that help explain the dynamic expansion in the use of concrete.

Adaptable Monolithic Terrazo Provides An Economical, Durable Floor

by **National Terrazzo and Mosaic Association**

Architects and builders throughout the South are turning to "monolithic" terrazzo as an economical way to provide building owners with low-cost terrazzo floors.

This type of floor should not be confused with the normal terrazzo floor in which the total fill over the concrete is specified to be 1¾ to 3 inches deep.

Monolithic terrazzo is a mixture of marble chips and portland cement, so installed that it is bonded to or integral with a prepared concrete slab. The terrazzo should be installed ⅝ of an inch thick directly to a cement slab which is still green. There is no intervening underbed.

Monolithic has, for the most part, found popularity in the south where, ordinarily, climatic conditions create no movement in the slab. The National Terrazzo and Mosaic Association will not recommend the use of monolithic terrazzo in areas where ground or other pressures may cause slab movement and consequent cracking in the terrazzo.

The composition of the terrazzo in a monolithic installation is identical to that in the conventional jobs. The only difference exists in the elimination of the underbed. Thus, the terrazzo layer becomes a finish to the concrete slab.

Although not a new method, it is finding wide acceptance in home-building in relatively warm areas because it combines economy with the physical advantages inherent in terrazzo.

When properly cleaned, terrazzo actually improves with age. It develops a finer sheen and, as time goes on, demands less, rather than more, maintenance. Furthermore, its endurance usually eliminates the need for replacement. Terrazzo being a plastic material, is therefore adaptable to any shape, size, or contour of surface.

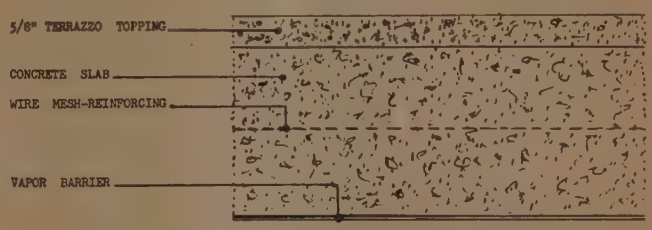
Although the most dramatic increase in the use of monolithic has been in homes in the south, this type of terrazzo installation is also used extensively in industrial plants everywhere when a hard finish is necessary to absorb the heavy traffic and materials that severely punish other floor materials.

Schools, churches, apartment houses, hotels, and other buildings in the south are contracting for the use of monolithic terrazzo floors.

A few in Florida currently scheduled are the Barcelona Hotel and the Surfside Town House in Miami Beach; the Pawley Office Building in Miami; a medical clinic in St. Petersburg; a Jesuit high school in Tampa, and an apartment house in Jacksonville.

Although centuries old, terrazzo retains its status as a modern floor finish which is widely used in nearly every type of building. The men who lay terrazzo are almost exclusively of Italian descent who learned the art from their fathers. The laying of terrazzo is an intricate skill and should be installed by, or under the supervision of, a trained terrazzo mechanic.

Concrete Base or Slab: When the concrete slab is laid directly on a natural ground surface, it should have a minimum thickness of four inches and be reinforced with wire mesh. The slab should be separated from the natural ground surface by either overlapping 15-pound asphalt impregnated roofing felt, plastic sheeting, or other approved waterproofing materials. In areas having an excessive rise of ground water, the concrete should also be waterproofed with an accepted compound or waterproofed portland cement. This vapor barrier is of the utmost importance in preventing the accumulation of water on the finished floor and, thereby, in the rooms themselves.



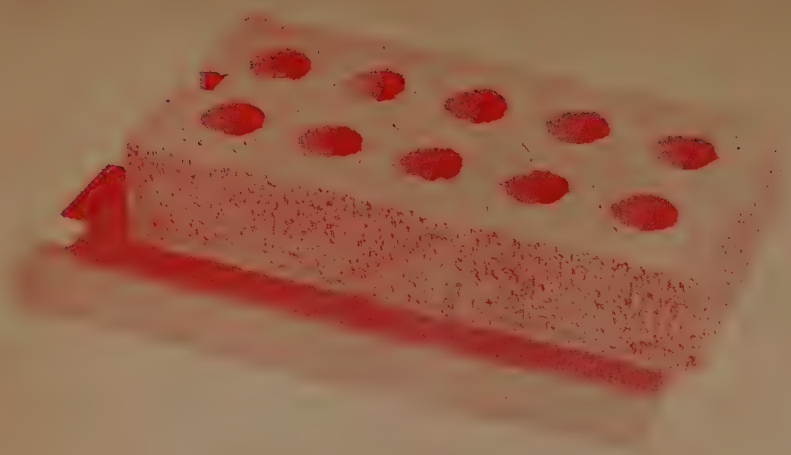
MONOLITHIC TERRAZZO ON NATURAL GROUND SURFACE

The concrete should be mixed and placed in accordance with the building code of the area. The slab should be broom-finished to remove all laitance and to leave a slightly roughened surface to insure a bond between the concrete and the terrazzo finish. The surface of the slab should not vary in any direction more than ⅛ of an inch when tested with a ten-foot straight edge. The concrete slab should be cured by either ponding water on the surface, or by maintaining a wetted covering of sisalkraft paper.

Where a pitch in the floor is required, the concrete slab should be pitched to the required degree.

Divider Strips: Although monolithic terrazzo is generally installed residentially without the use of divider strips, commercially, where larger areas are involved, it is recommended that divider strips of the "T" or "L" type be installed.

Continued on page 78



The "SCR brick," developed by the Structural Clay Products Research Foundation to meet today's requirements for single-family, one-story homes. Its dimensions are 2 1/16 inches high x 11 1/2 inches thick. The "SCR brick" is a thru-the-wall unit, needing no back-up materials.

SCPRF Gears Masonry Industry For The Future

by **The Structural Clay Products Institute**

While the country's structural clay products producers are proud of the ancient tradition of their calling which goes back through the centuries, their sights are set on the 1958 scene and on the future. Through the efforts of a united industry, they are devoting an impressive portion of their time and financial support to the work of the Structural Clay Products Research Foundation, research arm of the nation's brick, structural tile and architectural terra cotta manufacturers.

Clay products manufacturers have pooled their financial efforts in support of research, fully aware that the *combined* efforts of the industry will result in greater new products and methods than any one of them, large or small, could develop.

Organized in 1950, the Structural Clay Products Research Foundation has now grown to the point where it occupies its own modern laboratories on the shores of the Fox River in Geneva, Illinois, a growing community of industrial research organizations. The $500,000 research center, which was opened in 1956, houses all of the industry's research programs under one roof.

The foundation itself is headed by Robert B. Taylor, SCPRF Director, and has a staff of 35 clay products research men. The multi-million dollar operation is based on one principal objective: "end-use" research. This means that the program is dedicated to seeking means for putting clay products in the wall at a lower total overall cost. In its search for these lower overall costs, all areas of clay masonry are investigated—wall construction, clay unit designs, site construction techniques, and others.

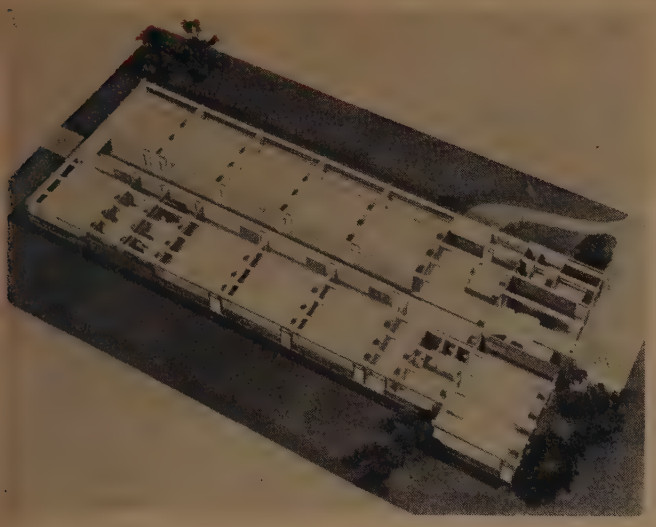
Now in its eighth year of active research, the SCPRF has already developed an impressive array of products and methods, some of which are already in use and others of which will soon become familiar parts of the construction scene.

The introduction of "SCR brick"* in 1952 is one of the achievements which is now in use and proving its worth more every year. The unit was developed for the large percentage of current home building which is one story in height. It builds a single wythe wall, six inches thick that does not require either masonry or frame structural back-up materials. Because only four and one-half units must be laid per square foot by the mason, it radically reduces the number of units he must lay per square foot and sharply increases the amount of wall he can produce daily. Over 30,000 "SCR brick" homes today are a strong testimonial to the fact that in a great many areas of the country, "SCR brick" homes can be constructed at a cost competitive to frame. There are non-residential uses of "SCR brick" which are important in the construction field today. For example, this six-inch through-the-wall unit has been used successfully in schools, motels, one-story factories and for load-bearing industrial partitions.

In connection with schools, the clay products Research Foundation has developed the "SCR"** school design concept. This is a cellular or "egg crate" masonry construction design, making full use of the load-bearing qualities of clay products. Its basic structural element is an "L"-shaped clay masonry interior wall, which is repeated as necessary to build up the floor plan. Except for

* Reg. U. S. Pat. Off., Pat. Pend., SCPRF
** Reg. U. S. Pat. Off., SCPRF

Objective is "end use" research . . . means for putting clay products in the wall at lower total over-all cost.



The "SCR" school design concept, which is a cellular or "egg crate" masonry construction design, which makes full use of the load-bearing qualities of clay products.

Prefabricated panels made of 36 special norman-face brick set in stack bond are lifted to the wall by a special hoist equipped with a vacuum device.

end walls, the exterior walls are non-structural curtain walls and can be built of masonry or glass in any proportion. The design concept calls for building the masonry interior walls of "SCR brick", the six-inch thick unit.

A research-developed product which has caused a great wave of interest since its announcement five months ago is the "SCR building panel"*, a new prefabricated brick panel, two and one-half inches thick. Currently the panel consists of 36 brick arranged in stack bond, one foot wide and eight feet long. The "SCR building panel" was first used successfully late last year in a one-story residence in Geneva, Illinois. The research staff is working on further applications of the panel which at present can be made as long as 12 feet. Because of its size, the "SCR building panel" has a place in curtain wall construction as well and plans are being made to introduce it in that field. With regard to color and texture, the prefabricated panel is as flexible as any brick currently in use. All clay products made today can be cast into "SCR building panels". This means that not only the wide range of brick colors and textures will be available, but that the whole rainbow of colors in the field of structural tile and architectural terra cotta can also be applied.

Last summer, when the Federal Civil Defenes Administration conducted atomic blast tests in Nevada, the Structural Clay Products Research Foundation participated in the tests and came up with a wealth of design information. The most dramatic aspect of the blast test was that a windowless school classroom unit built with 10-inch reinforced brick walls successfully withstood the effect of atomic blast. This occured during the 1957 "Operation Plumbbob" nuclear test series at Las Vegas. The 32 by 28 foot building was designed for 30 students and would have afforded a high degree of protection to its occupants in 75% of the blast area of a typical nuclear weapon.

Just as significant as protection from atomic blast is the fact that the technical knowledge gained from these tests have resulted in design principles which give a structure protection from the destructive forces of nature—hurricane, tornado and earthquake. The clay industry research labs are now at work applying the design knowledge gained from the tests in a variety of practical construction techniques. When the studies and designs are completed, they will be announced to the construction industry.

Even a brief survey of some of the clay industry's research projects must make mention of the work being done to develop lightweight clay materials. A huge three-story silver-colored furnace specially constructed for experiments in lightweight clay was installed at the Research Foundation last summer. Looking not unlike a giant ICBM rocket, the furnace is house in its own enclosed area. Active research is being conducted with the furnace to develop particles of clay which, because of certain heat applications, explode into an expanded material which can then be mixed with clay. The ultimate results of these experiments will be structural clay products of adequate strength with possibly half the weight of clay products now in use.

Douglas Whitlock, Chairman of the Board of the Structural Clay Products Institute, reflected the attitude of the whole clay products industry when he said recently, "The producers of brick and tile are proud of the research program of our industry. We are in the front ranks of industrial research in its efforts to give the construction industry even better quality building materials at the lowest in-the-wall costs."

* Reg. T. M., Pat. Pend., SCPRF

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Fabric-covered folding doors are modern, exciting, beautiful! And they're economical, too. They save space, they cut down installation costs and they're easy to maintain. Whether for giant room dividers or inconspicuous closet doors, they're the perfect way to increase usable floor space.

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National Woodwork Research Cuts Building Costs and Maintenance

by **National Woodwork Manufacturers Assn., Inc.**

The high quality of stock wood windows, sash and doors, will be further emphasized in 1958 by an enlarged series of commercial standards issued by the Commodity Standards Division of the U. S. Department of Commerce. These standards will, in turn, be incorporated as basic requirements in the new revised minimum property standards of the Federal Housing Administration and the U. S. Veterans' Administration if present recommendations of those agencies are approved. The present series of commercial standards relating to windows and sash embrace five separate standards as follows: CS 163-52 relating to stock windows, sash and screens; CS 193-53 for windows and sash using insulating glass; CS 190-53 for double-hung window units; CS 204-56 for awning and projected window units and CS 205-56 for casement units. A sixth standard relating to horizontal sliding window units is now in process of approval and will probably be published by the Commodity Standards Division early in 1958. Closely allied with the assembly of window and door units is CS 208-57 for exterior window and door frames. Another series of three standards for doors, interior and exterior, include CS 120-53 for pine doors, CS 171-50 for hardwood veneered doors, both solid and hollow core and CS 200-55 for hollow core flush doors. Thus with completion of the pending standard for horizontal sliding window units, the building industry will have a total of ten commercial standards for quality windows, sash, doors and frames, which will set a new all-time record for the largest number of commercial standards represented in a single industry.

Building Components Cut Building Costs

The use of factory fabricated component parts for buildings is one of the most progressive steps the industry has ever taken to insure high quality buildings at reduced cost. Panel sections for walls, roofs and floors reduce labor costs to the minimum both in the factory and at the building site. Wood window and door units are in the same category. Furthermore, streamlined production of such building components in factories with modern high-speed precision machines and rigid quality control inspections insures uniform high quality and long-term satisfactory service. The stock woodwork industry has kept pace with the present day trend toward mass production of window and door units which are among the most important of all building components.

Water Repellent Preservative Treatment

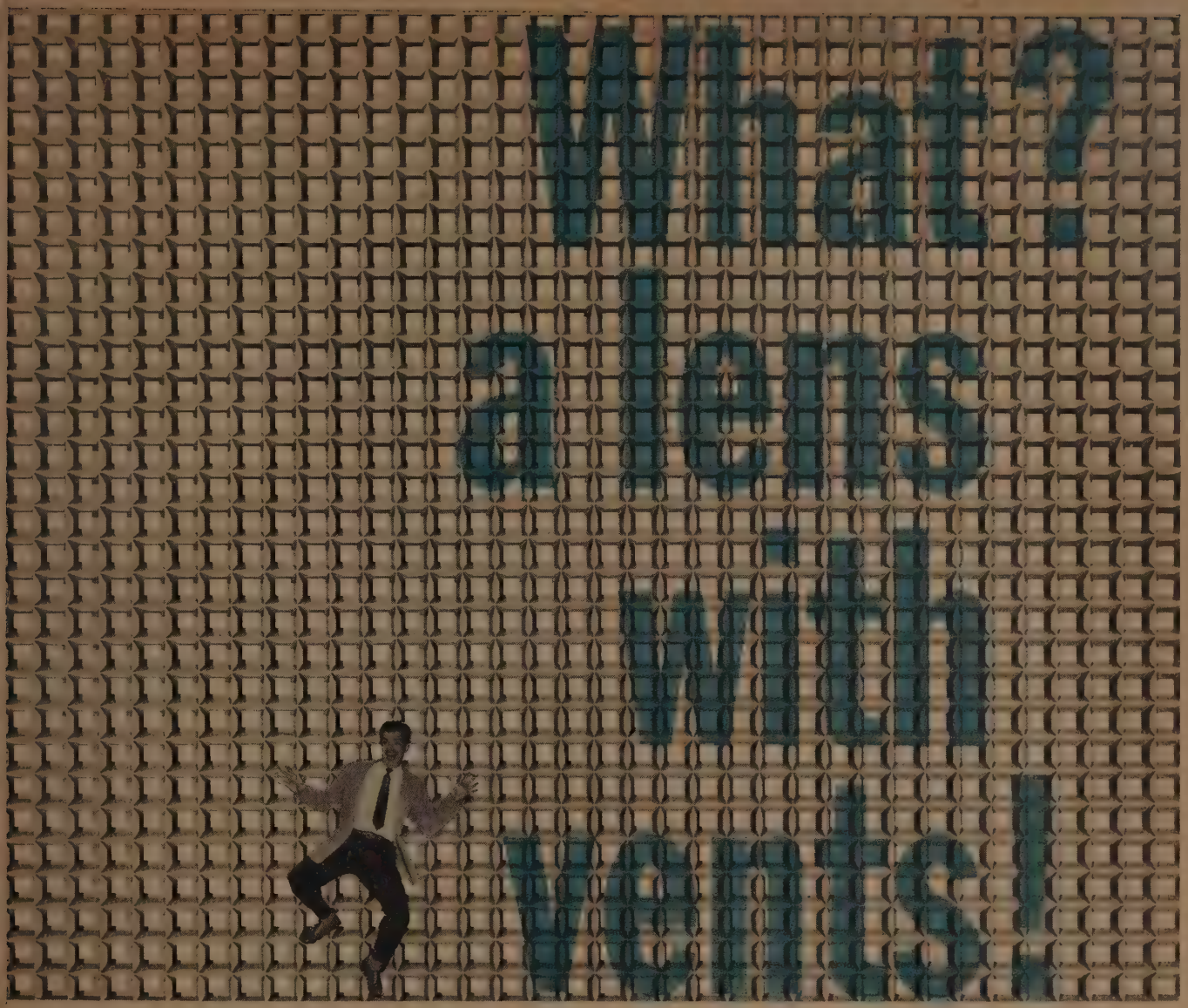
The National Woodwork Manufacturers Association is a pioneer in the field of water repellent preservative treatment of all woodwork products used in building exteriors. Research was begun about twenty years ago and still goes on. Preservative treatment—frequently referred to as toxic treatment—has practically eliminated the likelihood of decay. Water repellent treatment has gone a long way in eliminating or reducing swelling and shrinking. Future research will be directed toward complete dimensional stabilization of wood. An extensive project for this purpose is being sponsored by NWMA at the Forest Products Laboratory at Madison, Wisconsin. It was begun in 1956 and may be concluded in 1958. Extensive laboratory and outdoor exposure tests have been made. The test data to date constitute the most detailed study ever undertaken in the field of water repellency.

Fire Resistant Doors

Another important research project of the National Woodwork Manufacturers Association at the Forest Products Laboratory is concerned with the fire resistance of solid core wood doors. Two such tests have been made in recent years and will be published early in 1958. The purpose is to determine the fire resistance of an ordinary stock door—not one specially designed to be fireproof. While several manufacturers, by the use of fireproof materials in combination with wood, are making doors designed to resist fire for as long as an hour, such doors are necessarily expensive. The report of the fire resistance project referred to above will show that good quality solid core wood doors, though not designed for high resistance to fire, will actually resist the passage of flame for a surprisingly long period of time. Another phase of the project is concerned with the discovery of a material for locks and hinges which will not readily conduct heat. Metal door hardware, because of its rapid heat conductance, usually causes failure of the door in the area of the metal hardware long before any flame penetration occurs in any other part of the door.

New Combination Door Designs

For nearly two years the National Woodwork Manufacturers Association has had a contract with Raymond Loewy Associates to evolve new designs for wood combination doors. These new designs will not only set a new high standard for appearance, but for functional performance and easy operation as well. Samples are now undergoing extensive tests. The new designs will probably be in production during the latter part of 1958.



ballast men are amazed about Guth Prismoid-GrateLite*

When a recent visitor to our plant saw a section of the new Guth Prismoid-GrateLite lying flat on white paper, his eyes sparkled.

He held it up and exclaimed, "It's great! It's got holes!"

Our visitor was a ballast salesman, and he was mighty happy that the gorgeous new Prismoid has holes. As he explained, almost everyone is enclosing ballasts, cooping up the heat, cutting down fixture depth... making it tougher than ever for ballasts to serve their legitimate lives.

But here is Prismoid, a prismatic louver-lens *with holes!* The ballast salesman said, "It's certainly a step in the right direction!"

Thanks to Prismoid's *breathing action* ballasts get ventilation, lamps are cooled and the flowing air helps keep lamps, Prismoid and fixtures up to 50% cleaner than solid panels.

Guth PRISMOID GRATELITE matic Louver-Lens

*T. M. Reg. U. S. & Can. Pats. Pend.

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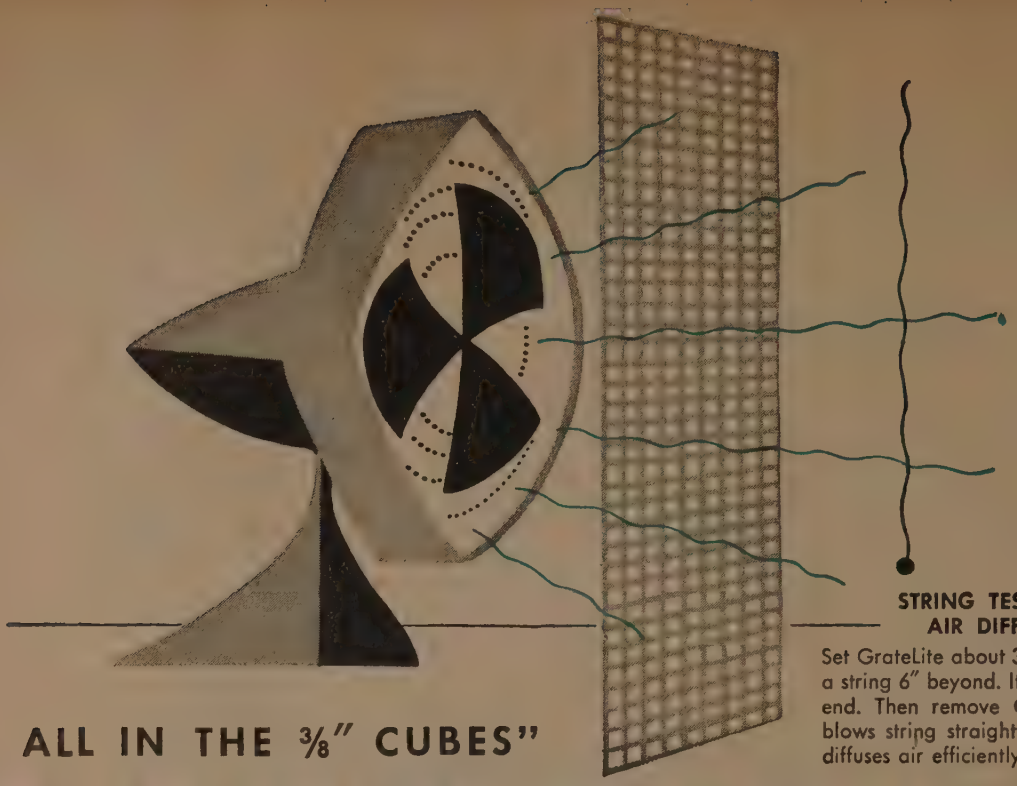

STRING TEST PROVES AIR DIFFUSION!

Set GrateLite about 30" from a fan. Hold a string 6" beyond. It ripples from end to end. Then remove GrateLite—and fan blows string straight outward! GrateLite diffuses air efficiently.

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GUTH GRATELITE CEILINGS ARE GREAT!

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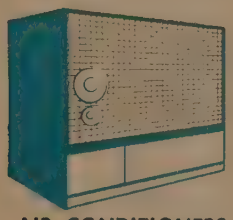
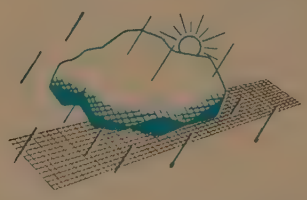


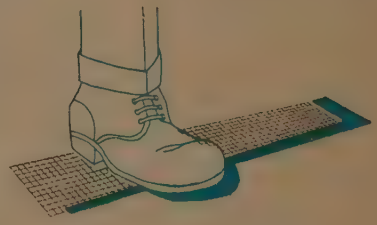
AIR CONDITIONERS USE ITS PRINCIPLE!

Small GrateLite-type plastic cubicles are used on latest model air conditioners to diffuse air efficiently. GrateLite scatters —diffuses AIR!



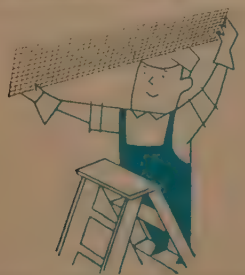
UNAFFECTED BY HUMIDITY!

GrateLite is one solid piece—not just glued-together pieces! It is dimensionally stable, and is unaffected by changes in humidity or by high humidity itself. GrateLite is a solid body!



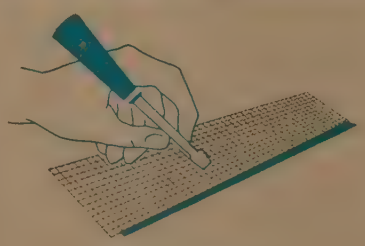
TOUGH AND RUGGED!

You can step on GrateLite . . . it won't mar, crumble or crunch. Its solid tapered vanes are Guth-engineered for maximum strength and ruggedness—important in maintenance!



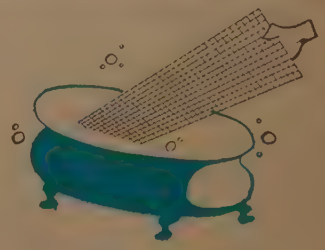
STANDS ROUGH HANDLING!

GrateLite won't bend, buckle or mar when taken down for cleaning and relamping, etc. It won't twist in your hand. Its body and substance are designed for long use.



SCRATCH-RESISTANT!

GrateLite doesn't scar easily—or rip or break when dropped or struck by a tool. Fingernails can't mar its usefulness. No "black eyes;" no damaged cubicles to destroy overall beauty and efficiency.



KEEPS ITS BEAUTY!

GrateLite holds shape when washed. Won't oxidize or blacken. Cubicles retain their shape. Scratches are unnoticeable. GrateLite isn't flat, dull or depressing. It's always cheerful, life-like and radiant.

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Several pieces of stone applied to a single piece of Tectum are set as one unit, or a large panel. Masons working with this new material for the first time on the Meadows Shopping Center in Indianapolis, achieved the rate of approximately 1,200 square feet per day.

Panels are anchored into the backup, or structural steel, with strap anchors and dowels. This type construction is very practical and can be adapted to various designs. For further information and details, write today.

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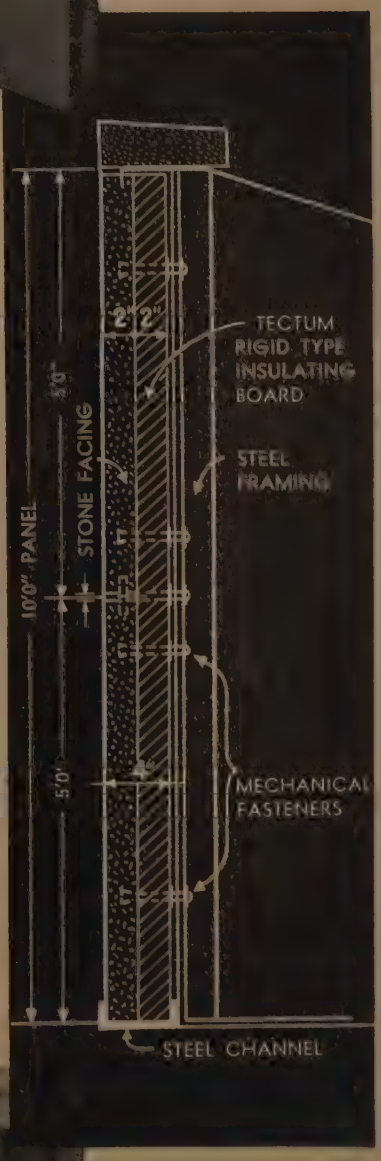
Founded 1932 as a service organization for the architect and contractor

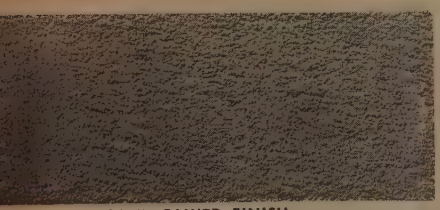


WALL DETAIL
Meadows Shopping Center
Indianapolis, Indiana

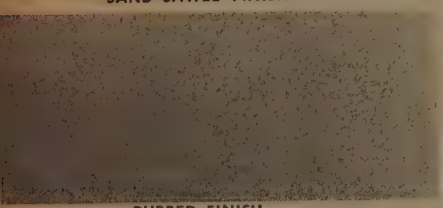
SHOT SAWED ASHLAR

SPLIT FACE ASHLAR

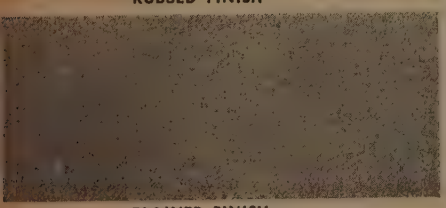
SAND SAWED ASHLAR



SAND SAWED FINISH



RUBBED FINISH



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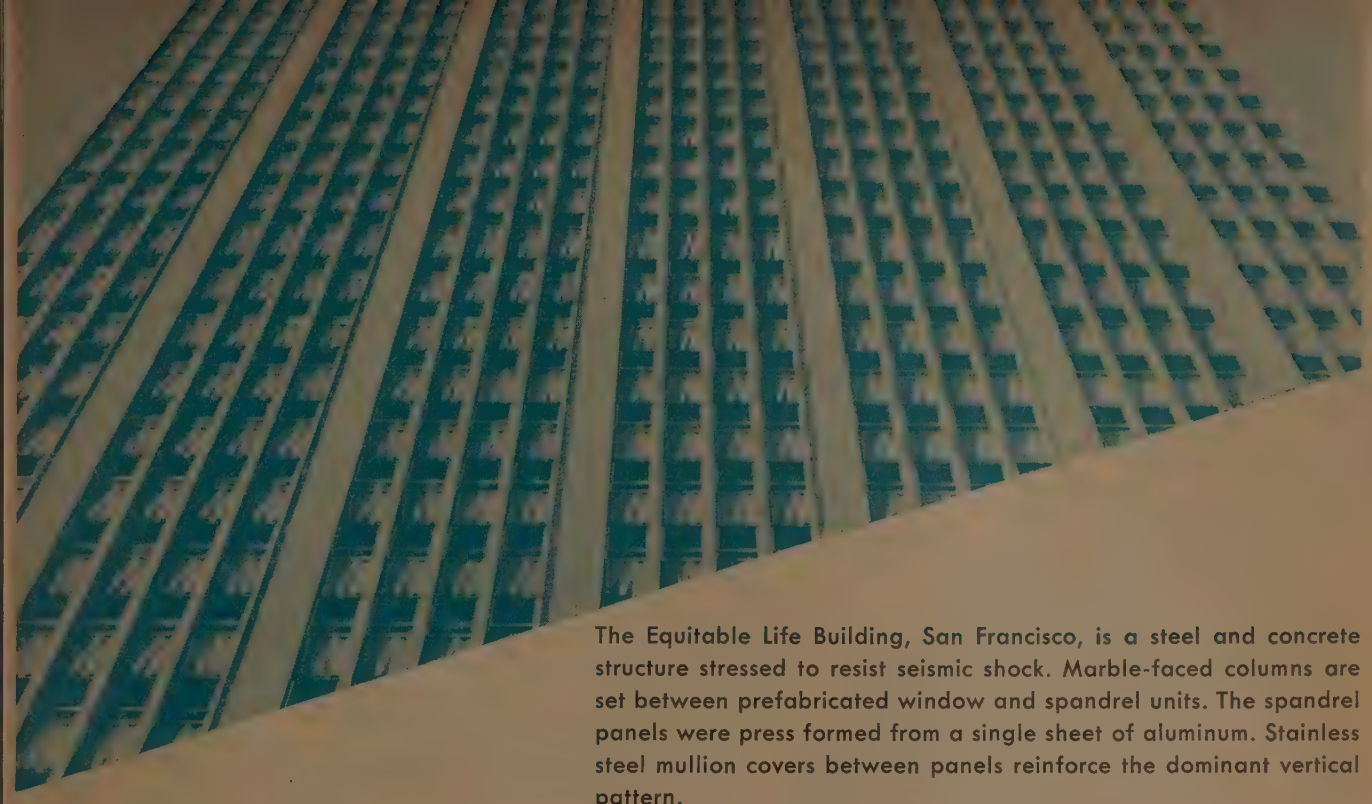
INDIANA LIMESTONE INSTITUTE

INDIANA LIMESTON



The Equitable Life Building, San Francisco, is a steel and concrete structure stressed to resist seismic shock. Marble-faced columns are set between prefabricated window and spandrel units. The spandrel panels were press formed from a single sheet of aluminum. Stainless steel mullion covers between panels reinforce the dominant vertical pattern.

New Developments Foreseen For Curtain Wall Industry

With the evolution of architecture from the "Sculptural Look" of the Nineteenth Century to the geometrical simplicity of today, a new family of building products has been born. Curtain wall is the most significant of the newcomers.

Current industry estimates place annual curtain wall volume at nearly $100 million—600 per cent above the 1950 figure. According to Kawneer Company, one of the nation's leading manufacturers of building wall systems, by 1965 the annual sales of the growing curtain wall industry will soar to over $325 million.

Curtain wall is best defined as an exterior nonloadbearing wall—or "skin"—consisting of panels attached directly to the building framework or to supports which are, in turn, attached to the framework. The exterior surface of the panels constitutes the building's façade.

The advantages of modern metal-and-glass building skins are many. Instead of laboriously erecting a wall brick by brick or stone by stone, a builder can now install a wall system using large prefabricated metal sections at a fraction of the time it took formerly. This means reduced costs as well as earlier occupancy. Additionally, thinner walls provide more income-producing floor space for a given area. When properly engineered, modern curtain wall systems also enjoy excellent insulating properties, safely accommodate thermal expansion and contraction, and resist weathering.

What The Future Holds

Technological advances continue as industry pioneers invest increasing sums in research. According to Jack M. Roehm, Director of Research at Kawneer, the future should see the following developments emerge:

(1) *Finished inside-outside curtain wall package.* This type of unit, which provides finished interior and exterior wall surfaces upon installation, has been realized to some extent already. But, a perfected system taking full advantage of the numerous synthetic materials is still in the research stage.

(2) *Radiant heating panels.* Building the heating function directly into the panel wall will result in more comfort and economy. Controlling temperature at the building wall is considered the ideal arrangement.

(3) *Integrated utility panels.* Successful development of this panel will permit factory-fabricated walls to include plumbing and electrical conduits.

(4) *Variety of color and form.* More economical methods of shaping panels and applying long-life colors will give the architect even greater design leeway in curtain wall construction.

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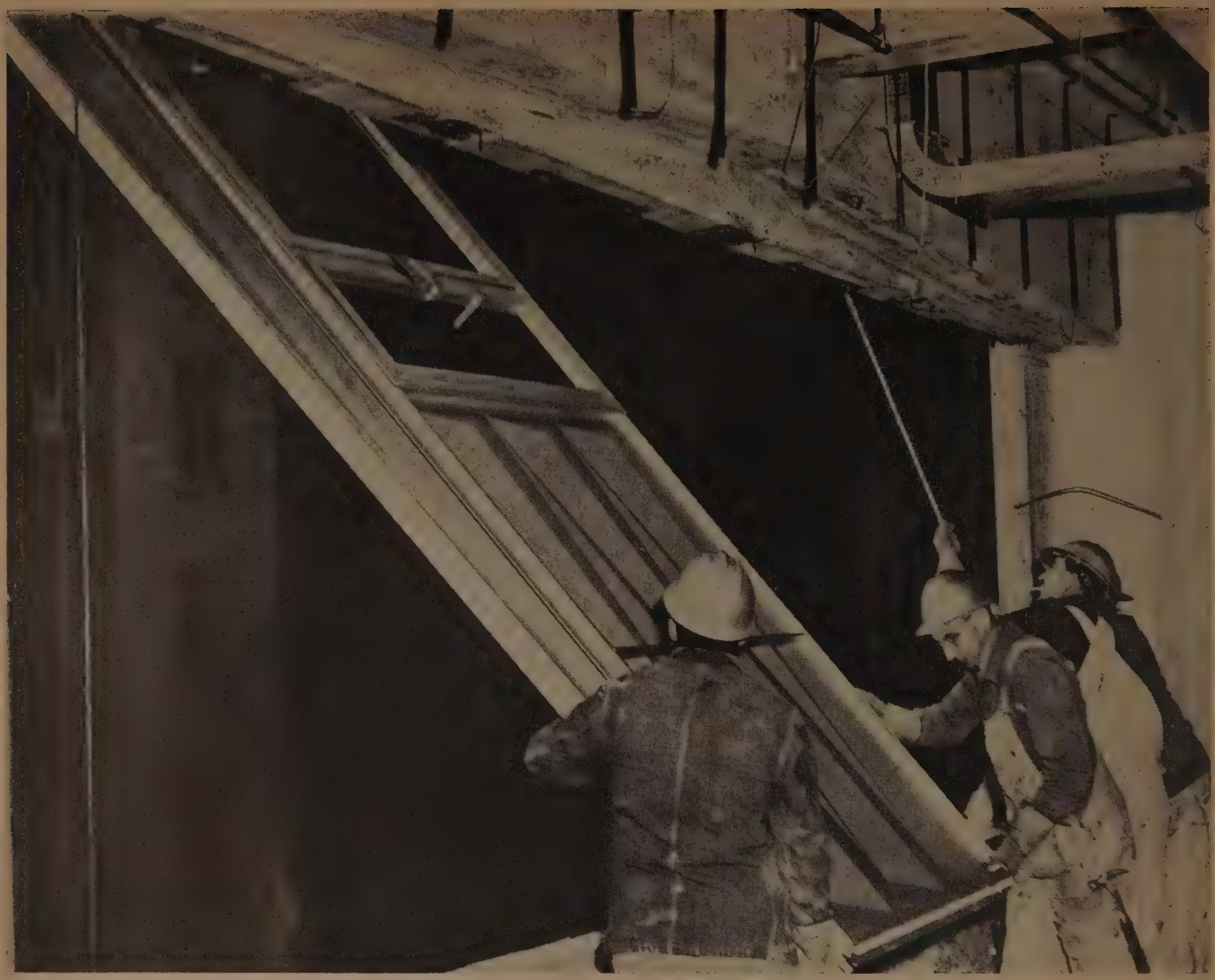

Workmen are shown sheathing the new Equitable Life Building with specially-designed curtain wall panels, which incorporate factory installed window and spandrel units. The embossed design, in addition to being of esthetic interest, provides the panels with the rigidity required to withstand high wind pressures.

(5) *Sun control.* Solar screening elements will be neatly packaged into the panel to present a unified, attractive appearance. Automatic control will maintain ideal sun-shielding conditions throughout the day.

Over 40 companies now furnish curtain wall materials but many are concerned primarily with producing panels or windows only. A number of them operate on a regional or local basis. However, a few companies have developed to the point where they are able to engineer and install entire curtain walls throughout the country. Kawneer Company, for example, assumes responsibility nationally for analysis, engineering, fabrication and installation of complete curtain wall systems in any and all metals.

Of significance, more and more curtain walls are being used today for small and medium-sized buildings as well as for skyscrapers. Aiding this trend is a new "Unit Wall" system of prefabricated modular wall components, recently developed by Kawneer. With these few units, an architect can achieve over 33,000 design combinations in the construction of one-, two- and three-story buildings.

Interestingly, the curtain wall concept is not new. Its beginning lies deep in time when lattice and basket-weave huts of early homebuilders were literally "curtained" with animal pelts or foliage. The slab-sided country barn is another early example. Mortise-and-tenon framing is enclosed by wood siding which serves no supportive function.

But, it was the invention of the steel skeleton frame—the first steel skeleton building was erected in 1883—that gave birth to the type of curtain wall construction which preceded the systems we know today.

The trend toward lightweight metal-and-glass building skins gained impetus after World War II. New architectural conceptions, together with technical achievements in fabricating, began changing the fundamental view of how a building should look. Thus, Americans were provided with a new architectural form they have come to prefer.

As a result, curtain wall has come to symbolize contemporary Western culture, in much the same way that Gothic, Renaissance and Romanesque styles epitomized earlier eras.

New Specifications For Floor Tile

by **Asphalt Tile Institute**

For the convenience of architects, builders, and others who specify flooring materials, the Asphalt Tile Institute has issued new specifications for three of the most popular types of resilient floor tiles—Asphalt Tile, Grease Resistant Asphalt Tile, and Vinyl Asbestos Tile. The specifications represent the latest thinking of the industry on the physical properties that are required in each of these types of flooring in order to insure satisfactory performance of the product in service. They supersede all earlier specifications and are the result of a continuing research program that has been carried on by the Institute for a number of years. The following paragraphs give a brief outline of the main requirements in each specification.

Asphalt Tile Specification

The Asphalt Tile Specification covers both $\frac{1}{8}''$ and $\frac{3}{16}''$ tile commonly available in 9″ x 9″ squares. Some of the detailed requirements in it are:

Material—Defines the types of ingredients to be used in the tile

Bid Sample—How they are used to show color, finish, surface characteristics, etc., of the tile

Size and *Thickness*—Gives the tolerances permitted for each dimension

Other requirements and tests that are included in order to maintain this standard of quality are:

Indentation—Three indentation tests at different time intervals, and at normal and elevated temperatures, guard against excessive marring and indentation

Flexibility and *Impact*—Insures conformability of the tile and resistance to cracking or breaking under sharp impact or heavy loads

Curl—A moisture test to indicate the satisfactory behavior of tile in on-grade or below-grade installations

A sampling plan for selecting the tiles to be tested also is included in order to assure adequate protection to the user as well as to the manufacturer.

Grease Resistant Asphalt Tile Specification

The Grease Resistant Asphalt Tile Specification covers both $\frac{1}{8}''$ and $\frac{3}{16}''$ tile commonly available in 9″ x 9″ squares. It also covers two classes of grease resistant tile.

Class I—Edible Oil Resistant
Class II—Mineral Oil Resistant

The specification includes all of the requirements and tests in the Asphalt Tile Specification, plus tests to determine the resistance of the tile to common greases, alkalis, and cleaners in each of the above classifications.

Vinyl Asbestos Tile Specification

The Vinyl Asbestos Tile Specification covers both $\frac{1}{8}''$ tile, and tiles of less than $\frac{1}{8}''$, but not less than $\frac{1}{16}''$ thickness, commonly available in 9″ x 9″ squares. It includes all of the requirements and tests in the Asphalt Tile Specification, but the severity of test in most cases is greater because of the higher quality level of the product. For the same reason the following requirements and tests that are not in the Asphalt Tile Specification have been added.

Flexibility (After Aging)—Assures the permeability of flexure and conformability

Dimensional Stability—An accelerated aging test to insure that the tile will have dimensional stability after installation

Resistance to Solvents—Tests to indicate that the tile is suitably resistant to alcohol, oils, alkalis, cleaners, and detergents found in normal use

How To Obtain Copies

If you are an architect, builder, or one who has to do with the specification of flooring materials, you may obtain a single copy of any, or all, of the above specifications without charge by writing to the Asphalt Tile Institute, 101 Park Avenue, New York, N. Y.

McBurney Indentation Tester (left).

Flexibility Tester (left).

Curl Tester (right).

New research center of the Tile Council of America, located four miles north of Princeton, N. J. It was designed by O. Klein Fulmer, AIA.

Tile Council Researchers Develop Cements and New Prefabricating Technique

by **Tile Council of America, Inc.**

The main objective in the Tile Council's research program is aimed at stimulating the mass use of ceramic tile in all types of building construction.

New developments in tile cements, grouts, and the manufacture of preassembled tile panels of various sizes are succeeding in doing just that. Much of the fundamental research on the various cements, grouts, and preassembly of tile panels was first begun at Rutgers University's ceramics school where the Council's research activities were formerly located. Just recently, the Tile Council opened a new research center which is currently developing three main technical advances aimed at stimulating the increased use of tile. These new developments are:

(1) A new cement mix that reduces labor, time, and cost of tile installation while affording a bonding strength about double that of the conventional type of mix;

(2) New grouts (special cements for filling in tile joints) for heavy duty industrial installations and for residential use. A new kitchen countertop grout, for instance, has been developed which is stainproof against foodstuffs and other typical household items. Strong and permanent, the new grout affords a maximum sanitary surface;

(3) Pre-assembled tile panels for prefabricated building. Although still mostly in the experimental stage, new machinery and special grouts are being developed for the mass production of tile panels for ready installation anywhere inside or outside a building.

Several manufacturers have been licensed to produce the new mortar mix; in addition, the countertop grout is slated to be produced under license of the Tile Council, and the pre-assembly of tile panels has already begun to

This photo, slightly exaggerated for purposes of visualization, emphasizes that a thin layer of 1/16 of an inch of the new mortar mix for ceramic tile (left) has at least twice the bonding strength as a full-inch-or-more thickness of the conventional mix (right).

Stainproof kitchen countertops are now possible with a new countertop cement for ceramic tile joints, according to the Tile Council of America. No foodstuff or chemical in household use can stain the newly developed countertop. The new joint cement will not crumble out nor lose its original color. Manufacture of the material is slated to start immediately.

Pre-assembled tile panels are removed from their baking plate by Don Robinson, head of engineering research, in a demonstration at the Council's research center. The mobile "oven" (left) has been rolled away from the tile panel after the special joint cements have been hardened by heat. A 15-foot square panel can be produced about every 15 minutes.

New ceramic cement reduces labor, time and cost of tile installation.

be a factor of importance in the tile market. Current preassembly is done mostly for exterior installations.

Although only recently introduced to the building profession, the new cement mix has already made a strong, favorable impression. A layer of the new mix only $\frac{1}{16}$ of an inch thick will have twice as much bonding strength as the old type applied in a setting bed one inch or more in thickness. In addition to this strength power, the mix will allow tile to be installed without its first being soaked in water. This is a saving in time since the old type mix required that the tile be soaked first or otherwise it would draw a certain amount of moisture from the cement bed and thus interfere with proper curing.

This discovery not only has the advantage of the well-known adhesive method of setting tile—that is, requiring only a thin layer of the material to hold tile—but it can also be used for leveling over rough areas, a function that cannot be performed by adhesives.

This material, extremely strong and flexible, is able to resist heavy structural stress in a building, and can be used, virtually, over any backing including dry wall.

It is the Council's belief that their new kitchen countertop grout, just recently licensed for manufacture, will open additional markets for ceramic tile. Ceramic tile countertops have received much popularity in certain parts of the country, especially in the West. One obstacle that had been held against using tile was the fact that in other areas the countertop grout stained easily or turned gray with age. However, this is no longer the case. The tile industry has now developed a permanently white, sanitary, stainproof grout that is more suitable for kitchen use than any other material. It is durable, hard, and cannot crumble out.

This new tile comes in a variety of colors which are just as permanent as the white tile. In addition to this countertop grout, Tile Council research is progressing on heavy-duty alkali and acid-resisting grouts fit for industrial use. These should be introduced on the market within a short time.

There is a considerable way to go in the development of pre-assembling techniques. Intense analysis must be made first to see which way prefabrication itself is to go, how soon it will go, how well, and how much. However, through Council research, basic techniques have been developed for the mass production of panels.

New Research Improves Performance Of Lightweight Concrete Roof Decks

by **Perlite Institute**

Recent tests of perlite concrete roof decks have emphasized the ability of this type of construction to combine the functions of lightweight structural deck and incombustible insulation.

Essentially, light structural perlite concrete roof decks consist of a mixture of perlite aggregate (an expanded volcanic rock) and portland cement poured in place over a permanent form. No additional insulation is needed in most cases because of the excellent insulating value of the perlite.

Testing programs have therefore concentrated on reducing costs and improving performance in the following ways:

(1) Reduction in weight of the deck and lengthening of allowable spans between joists;
(2) Determination of additional fire resistance data;
(3) Elimination of reinforcing mesh in some systems;
(4) Development of more efficient means of venting construction moisture after roofing is applied.

New Load Test Data

Perlite concrete creates the lightest concrete-and-formboard type of roof deck available, thus permitting cost savings by reducing the weight of supporting joists and beams.

In the past it was felt desirable to use a 1:4 mix (1 bag of portland cement to 4 cubic feet of perlite aggregate) to give the deck adequate structural strength. A 1:4 mix produces perlite concrete with a density of about 36 lbs. per cubic foot and a compressive strength of 440 psi. Subsequent load tests have now shown that when perlite concrete is placed over wood fibre formboards, a 1:6 mix is adequate. The 1:6 mix provides a concrete weighing only 27 lbs. per cubic foot with a compressive strength of 180 psi. This represents a 25% saving in the dead load of the perlite concrete and a comparable increase in the insulating "k" factor. When subjected to a full scale load test witnessed by the U. S. Army Corps of Engineers, a 2 inch thickness of 1:6 mix perlite insulating concrete on 1 inch thick wood fibre insulation board 32 inches wide supported an ultimate load of more than 300 lbs. per square foot.

The following chart shows the advantages of specifying a 1:6 mix as compared to a 1:4 mix:

Tests have shown that a roof deck system consisting of 2-inches of perlite insulating concrete (reinforced with wire mesh) placed over one-inch formboards supported by bulb tees weighs less than 7 psf, yet will support more than 300 psf.

Thickness over 1" Formboard	*Insulating "U"*		*Weight PSF*	
	1:6 Mix	*1:4 Mix*	*1:6 Mix*	*1:4 Mix*
2½"	.121	.139	7.00	8.85
3"	.109	.127	8.10	10.35
3½"	.100	.117	9.25	11.85
4"	.092	.109	10.35	13.35

Similarly, a load test of 1:6 mix perlite concrete placed over paper-backed welded wire mesh showed that

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Perlite concrete is easily placed and screeded to the specified depth by conventional means since its wet weight is only about 40 pounds per cubic foot. Shown is perlite being placed over formboards.

New Features With Hydronic Heat

by **The Better Heating-Cooling Council**

Many increasingly popular features in hydronic home-heating equipment are appealing to the homeowner who likes comfort with practicability. Hydronics is the science of heating and cooling with liquids.

Ranging from snow melting (for sidewalks and driveways) to built-in water heaters and zone control, the equipment is both economical to install and operate.

Forced hot water systems have made giant strides during the last decade. Regardless of the house style, just about all you have to do is pay your fuel bill when it comes due, and the rest is automatic—through controls that work 24 hours a day, regulating the heat output for different areas of the house, supplying you with hot water for appliances, tap and shower, and even melting snow that falls on your sidewalks and driveways.

First of all, today's new boilers are much smaller and much more efficient. About the size of a washing machine, they turn out much hotter water, send this same water through pipe or tubing about as thin as your finger, and distribute heat through radiator convector or panel recessed into the floor or wall.

Most new residential boilers contain a built-in water heater (which saves you both the price and space of a separate hot water tank), an automatic fuel burner, circulator, air-cushion tank, and various flow or pressure controls to keep the system functioning smoothly.

The boiler is made of cast-iron or steel, and provides hot water (often around 180°, but emphasis today is on higher temperatures—up to 215°—so that less square feet of radiation is needed) piped to new, low-lying baseboard radiators measuring no more than 9″ high. The baseboard fits snugly into the outside wall under the window and emits both radiant heat (direct heat rays which warm objects instead of air) and convected heat (which heats the air alone) to make certain that walls, floors, furniture, air and *you* are made warm.

Convectors may be selected instead of baseboard radiators. A convector is nothing more than a type of radiator with a finned-tube surface (the fins are aluminum, the tube copper) that transmits a great deal of heat from its accordion-like surface. The convector has a cover with vents at top and bottom. The room air enters through natural convection at the bottom, is heated, and, again through natural convection, reenters the room through the upper vents. Some baseboard radiators use the convector principle and are called finned-tube baseboards. A snap-on cover, with opening top and bottom, allows the finned-tube baseboard to respond very much like the convector. The convector also radiates and convects heat.

Panel heat—for floor or ceiling—is nothing more than an extension of the hot water pipe or tubing into a serpentine series of coils which are embedded in the floor or ceiling. No heat distributor is needed because the coils themselves heat the floor or ceiling, and this surface then radiates heat in much the same manner as baseboards or convectors. Pipe can be wrought iron, steel, or copper. Plastic pipe has been used for low-temperature installations, but thus far plastic pipe won't stand up under the reasonably high temperature conditions needed for residential heating.

Here's a view of a winter sidewalk free of ice and snow. The coils, embedded in the cement and connected to the regular house hot water boiler, carry a mixture of hot water and anti-freeze which melts the snow as it falls.

Continued on next page

Baseboard radiator, installed against the wall at floor level, emits a "curtain" of warmth which blankets the entire wall and its picture window.

Zone control is a fairly simple matter with forced hot-water heat. Two or more piping circuits are used for different areas of the house. The "active living area" for instance, can be kept warmer through thermostatic control than lesser-used areas such as bedrooms or the basement. Controls can also include an outdoor thermostat, which "warns" the indoor thermostat when the weather is changing, and also a clock thermostat, which increases heat early in the morning (just before you get up) and lowers it automatically after you retire. With a forced hot water system, one boiler is sufficient to handle as many zones as are required for any size house—split-level, ranch, or rambler—and the cooling system can either be incorporated with the heating operation (using the same pipes and distributor) or installed separately for seasonal comfort.

Because forced hot-water heat operates in a closed system, snow melting is a most practical application for the new home. Coils that connect to the regular heating boiler are embedded in the new driveway or sidewalk, and a mixture of hot water and anti-freeze circulates through the coils and melts the snow as it falls, doing away with long hours of snow shoveling and dangerous and slippery winter surfaces. A pushbutton or automatic switch controls the system. One system turns on when a calculated weight of snow falls. Another makes use of a photoelectric cell arranged to detect the showfall on a polished plate. Installation cost in a new 50-foot driveway averages less than $400, with operating cost running five or six cents an hour.

Built-in water heaters have caught also the eye of a growing number of cost-conscious homeowners. The expense of a separate hot-water tank is eliminated through the use of circular coils that fit right into the heating boiler. The coils feed a continuous supply of hot faucet water to kitchen and bath. For summer use, when the heating plant is not in operation, a special control regulates the boiler to maintain just enough heat for constant hot water.

Modern home-heating boilers have been designed by engineers to provide more heat and occupy less space. This unit heats the entire house yet leaves enough room for a finished playroom.

Jack Behrens of CRA's Technical Division checks the redwood finish systems for weathering effects. This is one of eight such test fences in various climatic zones of the U. S. Finish systems which meet CRA's minimum durability standards are listed in the Supplement to Data Sheet 4B3-1.

Dependable Grades and Finishes Result From Redwood Research

by **California Redwood Association**

When an architect specifies California redwood for a given structure, he has selected it on the basis of its ability to meet the requirements of a specific use. The characteristics which he looks for in lumber are: durability, beauty of grain and color, ability to take and hold opaque or natural finish systems, workability, and dimensional stability. In all of these qualities, redwood ranks near the top and, in many categories, exceeds all other American softwood lumber.

But it isn't enough that the architect can look in his Redwood Data Book or Sweet's Architectural File and find what grades and patterns of redwood he may wish to specify or which finish systems will give the desired effect —he must *know* that these grade specifications will be met and that the recommended finish systems (if properly applied and maintained) will give satisfactory service. It is this "guarantee" of quality toward which the Technical Division and the Inspection and Grading Division of the California Redwood Association are dedicated.

Redwood Grades

Guidance is given to the nine-man team of the Inspection & Grading Division by the Grading Committee of CRA. The "Standard Specifications for Grades of California Redwood Lumber" come under their scrutiny and any changes must be approved by them. Grading schools are conducted in the Redwood Region to maintain the high standard which has been established in past performance. CRA inspectors supervise grading at redwood mills and give special attention to the grading at mills who have the grade marking privilege and to the seasoning at the mills that use the "CRA Certified Kiln Dried" grade mark.

Whenever an architect specifies redwood for quality construction where the highest performance is desired, it should be grade marked, "CRA Certified Kiln Dried". This mark appears only on Clear All Heart, A-Grade (contains some of the creamy colored alburnum), and Shop grade lumber which has been properly kiln-dried and graded by mills under the supervision of California Redwood Association inspectors.

Improvements in techniques of air seasoning and kiln drying have been long-term objectives of the Redwood Seasoning Committee, which continues to be the nationally recognized authority on the seasoning of California redwood. The Technical Division of CRA has cooperated fully with this committee in working toward better seasoning and kiln drying techniques. Toward this continuing improvement of quality in CRA grade-marked California redwood, a grant-in-aid has been made to the Board of Regents of the University of California in support of research by the University's Forest Products Laboratory in Richmond, California. Elimination of some of the technical problems involved in the proper seasoning and finishing of redwood are the immediate objectives of the research. Studies will be made on the water soluble extractives which give redwood its pleasing color and great durability. With a better knowledge of the chemical composition and physical properties of these extractives, redwood mills can do an even more effective job of sea-

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soning and further improvements can be made in the natural finish systems for exterior redwood.

The objective of the Technical Division of the California Redwood Association is to supply technical assistance to producers and consumers of redwood to the end that the producer may obtain more and better lumber from his logs and may find profitable uses for those portions of the log which are unsuitable for conversion into lumber and that the consumer may get the maximum service and satisfaction from the redwood which he uses.

Exterior Finish Systems

Exterior finish tests on redwood carried out over the past eight years by the Technical Division of the California Redwood Association have shown that the most satisfactory results are obtained when the wood is left to weather naturally without benefit of any finishes, or with the application of a water repellent to retard the natural weathering process. Where a pigmented stain is desired, greater efficiency is obtained when used on rough-faced, or resawn, redwood. This rough surface will hold most stains up to twice as long as a smooth surface.

Architects who wish to specify a finish for exterior redwood applications should consult the latest revision of the "Supplement to Redwood Data Sheet 4B3-1, Exterior Finishes for Redwood". The supplement is the result of extensive tests on various exterior finish systems.

Listed in the latest supplement are the 20 natural finish systems which have met the minimum durability standards of the California Redwood Association. These survivors of 285 finish systems which have been submitted to CRA for testing over the past eight years.

Finishes are applied to redwood panels and subjected to an accelerated weathering test. At the same time, they are exposed to natural weathering on a test fence at Cloverdale (in the Redwood Region) for a period of 18 months. Finishes which pass these initial tests are then listed in the exterior finish supplement, which is issued periodically. The California Redwood Association also maintains finish test stations in Arizona, Minnesota, Texas, Missouri, Illinois, New York, and Florida under a wide range of climatic conditions. Finish systems which fail prematurely under any of these conditions are dropped from the supplement.

Material tested include water repellents, bleaches, flat pigmented stains, combinations of stains and clear finishes, and clear finishes by themselves. It is to be noted, however, that the clear finishes must be constantly maintained to achieve any success.

The use of water repellents to obtain a pleasing and natural weathering of redwood is highly recommended. These repellents require a minimum of attention and they protect the natural grain and beauty of the wood as it weathers to shades of tan and buckskin. (A special Redwood Data Sheet, 4B3-2 "Weathered Redwood", details the steps to take in achieving this naturally weathered appearance. It also gives a step-by-step cleanup process for freshening the appearance of exterior redwood which has been discolored by dirt and mildew.)

To back up the architect and specifier of california redwood in striving for greater satisfaction in quality construction during 1958, the California Redwood Association will be carrying the story of "CRA Certified Kiln Dried" redwood and its proper finishes to an even wider audience of lumber retailers, builders and homeowners through an increased program of promotion.

New products of California redwood are on the horizon but specification of CRA grade-marked redwood lumber and the use of tested finishes to achieve a satisfactory end result are of immediate importance.

Men who work on the green chain at redwood mills attend a Redwood Grading School under the direction of the Inspection & Grading Division, CRA.

A charge of "CRA Certified Kiln Dried" redwood comes from the dry-kiln at The Pacific Lumber Company, a member of CRA.

Cost Of Electric Heat Reasonable When House Has Thick Insulation

Electric space heating has moved out of the luxury category and into active competition with combustible-fuel heating systems. At the end of 1957, there were 313,500 homes and other buildings in the United States heated completely by electric resistance heaters or heat pumps, with the ratio roughly 9:1 in favor of private homes. Another 44,500 installations are expected during the current year.

These are the findings of a survey conducted by *Electrical World*, a national weekly magazine for the electrical utility industry. The survey covered 100 electric utilities representing 33 million meters—61 per cent of the national total.

The growth of electric heat is the result, indirectly as well as directly, of the public's increasing desire for more comfort in its homes. Air conditioning has become a major summertime consumer of electricity. Many of the country's utilities have experienced a shift from a winter to a summer load peak because of air conditioning; others expect such a shift in the near future, as they watch summer demand steadily close the gap on winter demand. These utilities are looking at electric heat as a promising residential winter load builder and balancer.

There is no shortage of favorable arguments concerning the comfort and convenience of electric heat. Fully automatic, it makes it possible to regulate the heat in any room—or even turn it off completely—without affecting the rest of the house. It's clean, odorless, makes no noise, and creates no dust or soot. There are no ashes to haul. furnaces to light and adjust, or fuel to order and store.

From the economics standpoint, thick insulation, properly installed, can bring the cost of electric heat in line with that of other heating systems. The first cost of an electric space heating system in a new house, including thick insulation, is about the same or less than that for a combustible-fuel system. Where the electricity rate for heating is two cents or less per kilowatt-hour, operating costs in a thickly insulated house compare favorably with operating costs of other systems in houses insulated to FHA minimum requirements.

Electric heat tends to reduce overall construction costs, too. House design can be simplified because no chimney is needed. If the house is to be air conditioned, the thick insulation makes possible the use of a smaller, less expensive cooling unit and lower operating costs.

Every utility surveyed by *Electrical World* recommends thick insulation; 24 of them have insulation requirements. The accepted standard is 6 inches of mineral wool or its equivalent in the ceiling, a filled frame wall,

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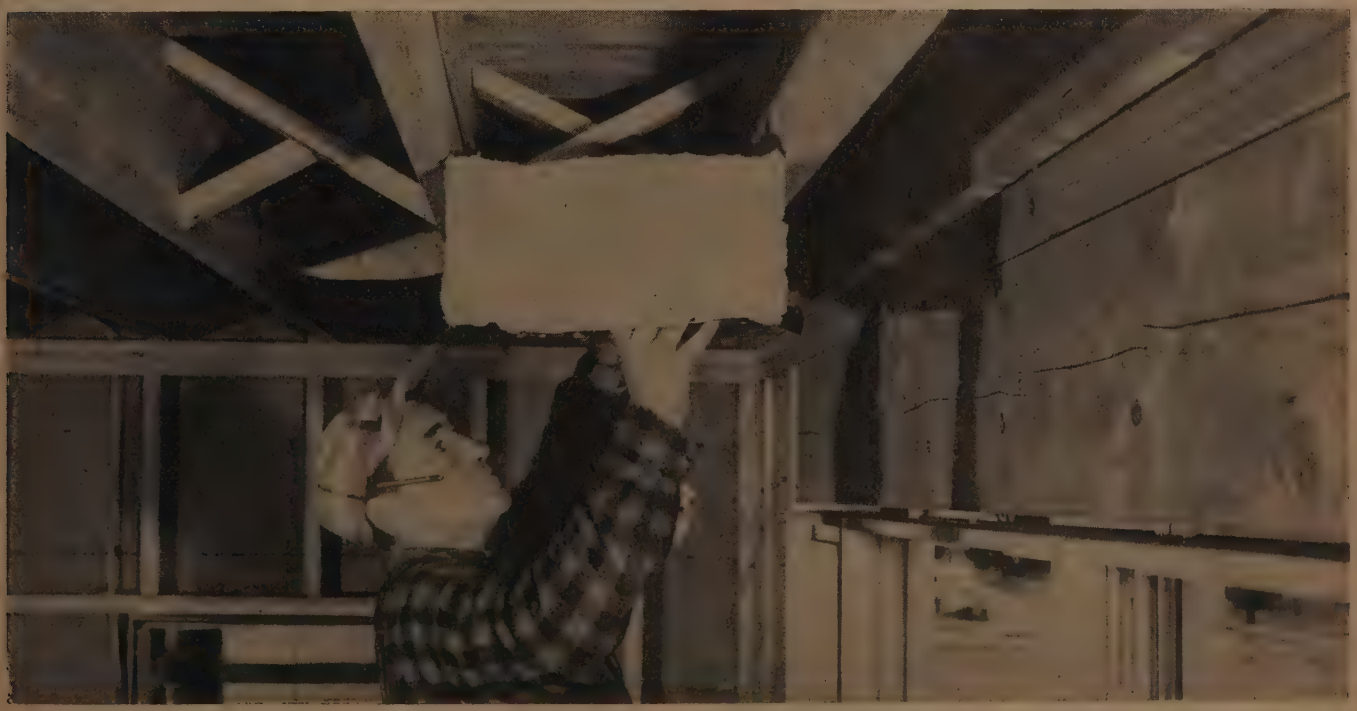


Workman fits 6-inch mineral wool batt into place between ceiling joists with vapor barrier facing down toward warm-in-winter side. Accepted insulation standard for electric head is 6 inches of mineral wool or its equivalent in ceiling, a minimum of 3 inches in walls, and 2 inches in floors over unheated areas or crawl spaces.

Three-man team installs radiant heating cable on ceiling lath of new home. One man staples loops at each wall as the middle man unwinds cable and passes it from one to the other. Additional staples will be placed at 16-inch intervals and ceiling will be plastered in usual way.

One of several types of electric resistance heating units is this 1,500-watt wall heater. In this commercial installation, use of electric heat eliminated need for basement to house combustible-fuel furnace, enabled firm to build extra storeroom.

2 inches in floors over unheated areas, and 3 inches or more in floors over vented crawl spaces. In homes built on concrete slabs, where the electric heat installation will be in the walls or ceiling, 2 inches of perimeter insulation 23 inches down is advised around the edges of the slab, or if construction permits, back from the edges underneath the slab for 18 to 24 inches.

When the heating system is to be placed in the concrete, the same perimeter insulation recommendations hold true, with the additional recommendation that the heating cables or tubing be sandwiched between a 3-inch base course of insulating concrete and a 2-inch regular concrete wearing surface.

To do its job most effectively, the insulation must enclose completely the heated areas of the house. This includes such areas as the faces, cheeks and roofs of dormers; the underside of overhangs (where there is living space above), and the common wall in an unheated, attached garage. Outside doors and windows should be tightly weatherstripped and either storm windows and doors or insulating glass should be used.

Improperly installed insulation is sometimes as ineffective as no insulation at all. Installation should be according to the standards of the National Mineral Wool Association. In the attic, the insulation should normally be placed between the floor joists, not the rafters. If there is a finished room in the attic, the insulation should extend up the knee walls, along the rafters, and across the collar beams. The floor area outside the finished room, from the wall plates to the base of the knee walls, also should be insulated.

Natural ventilation through at least two fixed vents or louvers should be provided in unfinished attics or closed off spaces between the insulation and the roof or ground, to reduce moisture in these spaces during the winter and to vent hot air in the summer. Tests at the University of Minnesota Engineering station have established that, for gable or hip roofs, there should be at least two vents, jointly providing not less than one square foot of free inlet and one square foot of free outlet area per 300 square feet of attic floor area. Under flat roofs, inlet and outlet area minimums are doubled.

If the space between the roof and the insulation is small, but covers a large horizontal area, a fan may be necessary. It should be able to move 6 cubic feet of air per hour per square foot of horizontal area. If blown insulation has been used, it is sometimes necessary to cover it in the area around the fan, or substitute batts in the fan area.

In houses with enclosed crawl spaces, the minimum recommended vent area should total two square feet per 100 lineal feet of building perimeter plus $\frac{1}{3}$ of one per cent of the ground area covered. Special treatment is necessary for the ground area under the building, whether there is a basement or not. Exposed earth should be cemented or covered with 55-pound asphalt-coated roll roofing, with all joints well lapped and the ground beneath well drained. This is to reduce the building's absorption of ground moisture. When a ground cover is used, at least 10 per cent of the minimum basement and crawl space ventilation recommendations should be used.

The vapor barrier should always be on the side of the framing facing the warm-in-winter areas of the house. If blown insulation is to be used in the walls of a new house, a vapor impermeable material such as polyethylene film should be stretched over the warm-in-winter side of the framing. The vapor barrier should be unbroken.

It is extremely important to insulate behind water pipes to protect them from freezing in cold weather. Either wedge the batt or blanket behind the pipes or sandwich the pipes between the two pieces of a batt that has been sliced in half. If the insulation is being blown, be sure all areas and voids are filled, especially around pipes, conduits, and other obstructions in the walls.

STANDARD SPECIFICATIONS

REVISED SEPTEMBER, 1957

Terrazzo and Mosaic

AS ADOPTED BY NATIONAL TERRAZZO & MOSAIC ASSOCIATION

METHODS: *NOTE: Two methods are used in laying terrazzo floors over concrete construction. One is to bond it to the structural slab; the other to separate it.*

When the first method is used, the concrete fill is provided for elsewhere, and should be left at least 1¾ in. below the finished floor. This concrete fill can be made of cement, sand, and coarse aggregates in the proportion of 1:2:4. Crushed stone or gravel are generally used as aggregates for concrete fill under terrazzo floors. Before the terrazzo contractor installs his underbed, he must see that the surface of the concrete slab is thoroughly cleansed of plaster droppings, wood chips and other debris. He should thoroughly slush it with neat cement grout to insure a good bond. The grout must not be allowed to dry out before placement of the topping.

The second method is used in buildings where cracking is anticipated, either from settlement, or expansion or contraction, or vibration. In this case, the terrazzo contractor carries his work from the structural slab up. This method requires a total thickness of at least 3 inches. The concrete slab is covered with a thin bed of dry sand, over which is laid overlapping 15# asphalt impregnated roofing felt. Over this, lay a reinforced wire fabric, lapping 4 inches, over which the underbed is installed, as in the first method. When this method is used, the cracks originating in the structural slab, terminate at the sand bed and are not likely to appear on the finished surface.

When terrazzo is used over wood floors, a thickness of not than 2 inches is required, and the following procedure should be followed:

First, cover the wood floor with overlapping 15# asphalt impregnated roofing felt. Over this, lay reinforcing wire fabric lapped 4 inches. Then proceed to lay the concrete underbed as specified under the second method.

For terrazzo laid directly on earth, special precautions must be taken to provide a vapor barrier. The concrete slab shall have a minimum thickness of 4 inches and shall be reinforced with wire mesh. The slab shall be separated from the natural ground surface by overlapping 15# asphalt impregnated roofing felt, plastic sheeting or other approved waterproofing material. In areas having excessive rise of ground water, special care should be exercised to insure waterproofness. The edges of the slab as well as the bottom may require waterproofing. This should be done with an accepted compound, or waterproofed Portland cement. This vapor barrier is of the utmost importance in preventing the accumulation of water on the finished floor and thereby in the rooms themselves. The accumulation of water on the floor surface would also discolor any metal floor dividing strips.

UNDERBED: The underbed for terrazzo, consisting of one (1) part of Portland cement, and four (4) parts of coarse screened sand, shall be spread and brought to a level not less than ⅝ inch below the finished floor.

STRIPS: Into the underbed, while still in a semiplastic state, install divider strips. These shall be 1¼ inch deep and have proper anchoring features; or preassembled decorative units may be used. Strips shall form borders, and divide the fields into panels.....x .....in size, or as shown on the drawings.

NOTE: The strips used in terrazzo floors are made of half-hard brass, white alloy zinc (99% zinc) and plastic in various colors. The thickness of the strips shall be specified, using Brown and Sharp gauges or the fractions of an inch. Strips less than ⅛ inch thick are made of uniform thickness for their entire depth. Strips ⅛ inch and thicker are made of the "heavy top" type, with the top member having a minimum wearing depth of ¼ inch, and a thin bottom member.

TERRAZZO TOPPING: The terrazzo topping shall be not less than ⅝ inch in thickness, and shall be of granulated marble. The color, kind and size of marble chips, as well as the stipulation for the use of white or gray Portland cement for the matrix, shall be specified by the architect. In lieu of this detailed specification, the color charts as shown in the Third Edition Catalogue of the N.T.M.A. may be listed by number. The topping shall be uniform in composition, and the same marble granules that appear on the surface shall be used for its entire thickness. The chip sizes most used in regular terrazzo are numbers 1 and 2, and sometimes number 3.

VENETIAN TERRAZZO: Shall be installed under the same basic instructions given above for the underbed and topping with the following exceptions: The terrazzo topping must be a minimum of 1 inch in depth in order to accommodate the large size chips, and should be kept at least ⅛ inch above the strippage to allow for grinding. Divider strips used in Venetian Terrazzo must be a minimum of 1½ inches in depth. The sizes of the marble chips used in this type of terrazzo run from numbers 4 to 10.

MIX: Composition for terrazzo shall be in the proportion of two hundred (200) pounds of marble aggregate to one bag (94#) of gray or white Portland cement, mixed dry. For every bag of cement, add a measured 5 to 5½ gallons of water, to make the mix plastic, but not flowing. An unnecessary excess of water is harmful. Where the cement is to be colored to obtain a desired shade, the color pigments shall be lime-proof and of a non-fading quality. Color pigments shall be added by weight and not by volume.

INSTALLATION: A minimum of one day after the underbed and strips have been laid, saturate the underbed with water, and remove the excess before laying the terrazzo topping. The mix shall then be placed in the spaces formed by the dividing strips, and rolled into a compact mass by means of heavy stone or metal rollers, until the superfluous cement and water are extracted; after which, it must be hand trowelled to an even surface, disclosing the lines of the strips on a level with the terrazzo fill. The finished surface shall show approximately 85% of marble granules.

CURING: The floor shall be kept moist for the next six (6) days at least, by wet sand, paper or curing mats.

SURFACING: When the floors have set sufficiently hard, they shall be machine rubbed, using number 24 grit or finer abrasive stones for the initial rubbing. They shall then be resurfaced using number 80 grit or finer abrasive stones, after which a light grouting of neat Portland cement of the same kind and color as the matrix, shall be applied to the surface, filling all voids. The grouting shall remain until the time of the final cleaning. All grinding shall be done in the presence of an excess of water.

FINISHING: Floors shall have the grouting coat removed by machines, using stones not coarser than number 80 grit. This cleaning or fine-stoning shall not take place sooner than seventy two (72) hours after the floor has been grouted, after which it must be cleaned thoroughly. It now is sealed with proper sealing material as recommended by member maintenance firms of the N.T.M.A.

WARNING: Acids are injurious to terrazzo, and must not be used.

CONDUCTIVE TERRAZZO: To prevent the accumulation of dangerous electrostatic charges, the surface of the floors in operating suites of hospitals, shall provide a path of moderate electrical conductivity between all persons and equipment making contact with the floors. The Acetylene Black Conductive Terrazzo floors as recommended by the N.T.M.A. meet these requirements. Our special bulletin on these floors is available.

NON-SLIP FLOORS: Ramped or other surfaces in terrazzo floors so specified, are to be made non-slip by the addition of an abrasive aggregate.

For heavy duty floors, the proportions shall be two (2) parts of abrasive to four (4) parts of marble granules, and the abrasive aggregate shall be mixed in the terrazzo topping for its entire thickness. For light traffic floors, the abrasive shall be sprinkled on

the surface only, so that the approximated 85% aggregate surface in the finished floor is three (3) parts of marble granules and one (1) part of abrasive aggregate.

A good non-slip surface can also be obtained by the surface sprinkle method as follows:—For light traffic floors, ¼ pound abrasive aggregate per square foot, and for heavy duty floors, ½ pound of abrasive aggregate per square foot of floor area.

TERRAZZO BASE, ETC.—Where shown on plans or specified provide a base.....inches in height, coved at the floor to..... radius, the top projecting ¼ in. beyond the line of finished plaster.

NOTE: If base is required without projection at top, specify it to be set flush with the finished plaster. Metal base screens or any temporary grounds are furnished and set by others, and should be specified under another heading.

Base shall be divided into sections not exceeding five (5) lineal feet, using base dividers of B. & S. gauge No. ..... The walls back of the base shall have a scratch coat of cement and sand mortar brought to a line ⅜ in. back of the finished face of the base, into which the base dividers shall be set.

NOTE: If base is to be applied against wood or metal studding, metal lathing must be provided for under lathing specifications.

The surfacing and grouting of terrazzo base shall be done in all respects as described above for the floor. Base shall be finished with a very fine stone, so as to leave the surface at a hone finish. Specifications should state whether terrazzo plinth blocks are required, and whether moulded or plain.

TERRAZZO STAIRS—Where terrazzo stairs are shown or specified to be built upon a concrete slab, the concrete contractor shall form the rough concrete work so as to allow 1½ in. from the top of rough concrete to the top of finished terrazzo tread, and 1 in. from the face of rough concrete riser to finished terrazzo riser.

The rough concrete for strings and curbs shall be so placed by the concrete contractor, so as to allow 1 in. for the scratch-coat and finished terrazzo.

Where steel stairs are installed to be finished with terrazzo, same are to be covered with metal lath securely anchored to steel sub-stairs by the lathing contractor, allowing for terrazzo at least 2 in. on the tread, and 1½ in. on the riser. Platforms are to be treated in the same manner, allowing not less than 2 in. for terrazzo and setting bed.

On pan-type stairs where treads only are to be of terrazzo, 1 in. shall be allowed for terrazzo and setting bed.

Pan treads and platforms must be well reinforced with ste pencil rods. Thickness of terrazzo topping shall be ⅝ in.

NOTE: Refer to description and details of terrazzo stairs Page 2.

NON-SLIP WORK—Treads, Platforms, and Landings shall made non-slip by mixing 40% abrasive aggregate with 60% marb granule. Colors of marble granule and abrasive aggregate to be selected.

TERRAZZO WAINSCOTS—Under another heading, walls that a to be finished with terrazzo are prepared with a scratchcoat Portland cement and sand to within 1 in. of finish. Where wa surfaces are of an absorbent material, the plasterer shall use wate proofed cement with the sand for the scratchcoat.

The terrazzo contractor shall apply his setting bed mortar ov the scratchcoat to within ⅜ in. of the finished face. This shall composed of one (1) part cement and three (3) parts sand.

Dividing strips No.....gauge shall be inserted in the setti bed forming bases and caps and dividing the dado into sections, as shown on the plans. The terrazzo finish shall then be applie pressed, and troweled plumb and true.

Terrazzo wainscot shall finish flush with plaster above project.....inches beyond same as shown on plans. Terraz wainscot shall be machine rubbed and brought to a smooth ho finish (or to a polished finish).

TERRAZZO PARTITIONS—Metal lath construction shall be pr vided by metal lath contractor as follows: Erect forms of met studding placed not over 12 in. c. to c. and securely fastened corners, at walls, and over openings; and well bedded into floo This framing shall be covered with galvanized expanded metal lat

Plaster contractor shall apply to the metal lath a scratchcoat one (1) part of Portland cement and two (2) parts screened san plumb and true, to within 1 in. of finished face.

Upon surfaces thus prepared the terrazzo contractor shall app and install the setting bed and terrazzo finish.

The finished thickness of partition shall not exceed 2½ in.

Terrazzo partitions shall be machine rubbed and brought to smooth hone finish (or to a polished finish).

SPECIFICATIONS FOR MOSAICS

Marble mosaic shall be prepared mounted on paper in the mosaic shop. Patterns and ornamental designs shall be as per approved full-size details.

Wherever marble mosaic floor is to be laid, the concrete foundation will be left 2 in. below the finished floor. Over this, the mosaic workers shall lay an underbed of mortar composed of one (1) part cement and three (3) parts sand, leveled off 1 in. below the finished floor. Then the setting coat shall be spread, composed of one (1) part Portland cement, two (2) parts sand, and a sufficient quantity of lime to make the mortar plastic. The mosaic tesserae shall be embedded into this setting coat.

The mosaic shall be pressed and tamped into the mortar. The paper back shall be removed, and the joints filled with cement. After the mortar has set, the whole floor shall be rubbed by machine and by hand where the machine cannot reach. The joints shall be then carefully grouted again full and smooth. At completion, cle the floor and deliver the work with a smooth hone finished surfac

Glass mosaic for mural decoration shall be prepared on paper accordance with designs and cartoons, furnished or approved the architect, in a manner similar to that specified for marble mosa and shall be set in a mastic composed of a mixture of one (1) pa Portland cement, and one (1) part lime putty and three (3) par clean sharp sand.

The scratchcoat for glass mosaic work shall be of a good quali mixture of Portland cement and screened sand applied to the surfa and given a fine cross scratch by plaster contractor who shall lea a uniform thickness of ¾ in. to receive the mosaic work.

All mosaic work shall be well grouted. Glass mosaic shall be l natural and washed perfectly clean.

GENERAL SPECIFICATIONS

Guarantee for Terrazzo and Mosaic

All work shall be guaranteed for a period of one year against defects caused by the use of inferior materials or workmanship.

Maintenance of Terrazzo and Mosaic

Consult your terrazzo contractor for "sealers" and treatments suitable for terrazzo. Do not use purely surface waxes, lacquer, shellac or varnish preparations. "Good-for-anything" materials should be avoided.

Soaps and scrubbing powders containing caustic alkali, acid, metallic salts, or other strong ingredients should never be used in the maintenance of terrazzo and mosaic surfaces. Cleaners containing water soluble inorganic salts or crystallizing salts, through mechanical action, may ruin the floors.

To properly care for *new* terrazzo and mosaic floors, they should be scrubbed two or three times a week, and mopped on alternate days. Use a neutral cleaner as recommended by member firms of the N.T.M.A. Use of the proper neutral chemical cleaners eliminate the necessity of rinsing after each washing, as the floor will not become slippery. A residue of soaps or improper cleaning materials is a common cause of slipperiness. Soap type cleaners, in the presence of lime in the cement, change into calcium grease, or what is commonly called soap film, which dulls the surface and hides t natural beauty of the terrazzo floors.

Correct maintenance methods that do not damage the terrazzo a maintain its natural beauty, actully cost less over a period of tim Terrazzo floors, properly maintained, will acquire a beautif natural sheen, proving low cost maintenance, which is an ou standing feature of terrazzo.

After treating a new floor in this manner for two to thr months, it will acquire a beautiful natural sheen, and will requi less work for its upkeep. Consult the N.T.M.A. Bulletin on "Te razzo Maintenance".

Working Conditions

The following facilities are to be provided free of charge to t terrazzo and mosaic contractor to enable him to carry out his wo most economically and with efficiency:

Space for storing his materials and equipment.
Water, light and heat above freezing point.
Use of elevator or other hoisting facilities and gangways.
Electric power and maintenance of 110 and 220 Volt with co nections on each floor, or at least on alternate floors.
Rubbish caused in doing his work will be collected by the te razzo contractor and placed where designated on each floor, f removal and disposal by others.

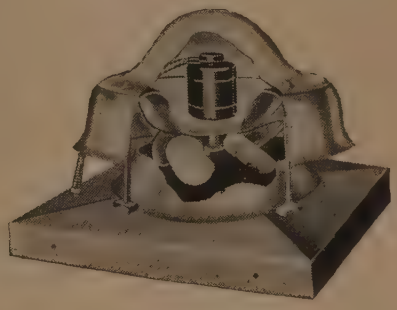
We acknowledge the assistance of the American Institute of Architects in editing the subject matter and form of presentation.

AirXpeler PRODUCTS NEWS BULLETIN

The deluxe quality and attractive design of Airxpeler is outstanding. Airxpeler standard units are constructed of heavy aluminum or steel. Other metals and finishes are available on request. SIMILAR OUTWARD APPEARANCE for all sizes and types of Airxpeler products is a special feature of the unique design of Airxpeler construction. Electric motors are mounted completely out of the flow of exhausted air stream; and are constant, two speed and variable speed, 10,000 hours—trouble-free operation.

Pat. No. 2571513,
2666378 others pending

"PB" PRESSURE BLADE POWER EXHAUSTERS



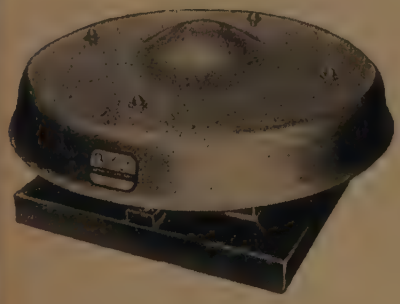
Efficient, exceptional quiet operation when used for low static pressures up to ½".

"GS" GRAVITY SIPHON OR "FAS" FRESH AIR SUPPLY

These are regular "PB" units less motor and pressure blade. Stormband design of "GS" model eliminates downdrafts. Motor and pressure blade may be added when positive exhaust is desired. "FAS" units are used to supply fresh air directly into ventilator or general fresh air intake of buildings.

"BCD" BACKWARD CURVED DRIVE POWER ROOF EXHAUSTER

Design of backward curve blower wheel assures efficient operation when used for static pressures above ½". Full venturi inlet eliminates turbulence and reduces noise.



"RC" RELIEF CAPS

Replaces GOOSE NECKS. Spun from one piece of metal. Sizes to 42" dia. throat openings. Used also as GRAVITY VENTS.

AMMERMAN COMPANY, INC.

110 North Second St., Minneapolis 1, Minn.

New!

COMPACT STREAMLINED BLACK OUT DESIGN

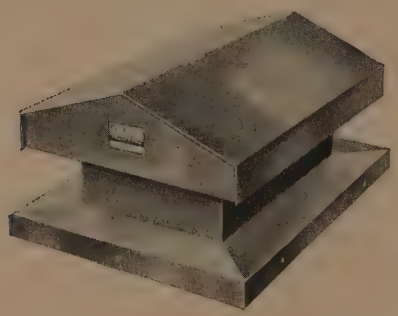
AirMpeler

"BCB" LO-BOY MODEL "PRE" Backward Curved Belted Power Roof Exhauster

Non-overloading backward curve centrifugal wheel. The extremely low silhouette design is accomplished by mounting the electric motor on the side of the support structure out of exhausted air stream.

SPECIAL IMPORTANT FEATURES

- Height reduced one half of ordinary, conventional belted units.
- Rigid motor support, no wheel wabble.
- Full venturi inlet eliminates turbulence, reduces noise.
- Low wind resistance.
- Self acting damper, installed on inside of outer skirts available when specified.

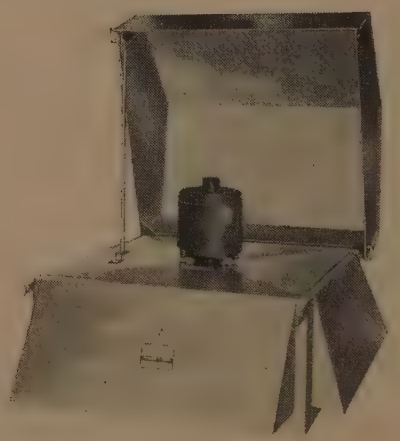


"RC" LO-BOY ROOF OR RELIEF CAPS

"RC" units are of square or rectangular Lo-Boy backward curve design. Used for gravity ventilator, pressure relief or air intake. When specified, the top on hinges for access to dampers or other equipment is furnished. Standard construction is 18 gauge mild steel. Finish is grey enamel; Also other metals on request.

BACKWARD CURVE "BCD" DIRECT DRIVE "PRE" UNITS

Constant, two speed and variable speed motors available. Wheels from 6" to 20" inclusive.



See Sweet's 1958
Architectural File 20C-AMM

We acknowledge the assistance of The American Institute of Architects in editing the subject matter and form of presentation.

Look down the aisle and see for yourself...

THIS UNIQUE VINYL TILE FLOOR STAYS BEAUTIFUL DESPITE:

★ SPILLED FOODS
★ HEAVY TRAFFIC
★ TRACKED-IN DIRT
★ STRONG CLEANERS
★ GREASE, WATER

Aisles always betray first signs of wear. But at New York's busy Hotel Commodore Coffee Shop—well—see for yourself.

This floor is Gold Seal Nairon® Custom vinyl plastic tile in the exclusive Venetian* pattern—the one that looks like fine marble. And every day it defies all the forms of abuse listed.

But here, even seam lines are all but invisible. And cracks, furniture dents and dull spots simply don't exist. Because this full-thick homogeneous plastic tile defies the most rugged kind of wear.

No other vinyl plastic tile floor offers so much value or luxury. It's quiet, comfortable and totally unique in design. And it's available in nine colors. So before you write your next flooring specifications—for new or replacement, commercial or institutional flooring—see Nairon Custom "Venetian." It's just one of the many remarkable floors in the complete† Gold Seal line.

SPECIFICATIONS: Nairon Custom Plastic Tile—9″ x 9″ tile, ⅛″ or .080″ gauges—3 patterns, "Venetian," "Sequin," "Marble"—total of 49 colors. May be installed over, on, above or below-grade concrete floor or over suspended wood underfloors.

†FOR HOME/BUSINESS/INSTITUTIONS:
By the yard and tiles—Inlaid Linoleum • Nairon® Plastics • Vinylbest* Tile
Cork Tile • Rubber Tile • Asphalt Tile
Printed Floor and Wall Coverings—Forecast® Vinyl, Congowall® and Congoleum® Satisfaction Guaranteed or Your Money Back *Trademark

FOR THE LOOK THAT'S YEARS AHEAD
Gold Seal®
FLOORS AND WALLS

Congoleum-Nairn Inc., Kearny, N. J.

New Jersey Bell Telephone Company uses rugged "Sequin" in its busy new office in Glen Ridge. This beautiful floor provides quiet comfort underfoot and outstanding wear resistance.

Abrasive Wheel Test proves "Sequin" will "look like new" through long service life!

The circular "After Test" area is the result of applying the abrasive wheel to the "Sequin" sample. See how it *has worn well through the linoleum*—and yet the pattern is still there, as clear and sharp as ever! Compare it with the "Before Test" area. *You can't tell the difference!* For information, write to Architects Service Dept., Congoleum-Nairn Inc., Kearny, N. J.

Telephone Company uses Gold Seal® 1/8" Sequin® inlaid linoleum in its new office in Glen Ridge, N. J.

Any busy telephone office needs a long-wearing floor that's easy and inexpensive to maintain. New Jersey Bell Telephone Company has installed Gold Seal 1/8" "Sequin" Inlaid Linoleum.

"Sequin" gives your busiest industrial or institutional clients modern, textured floor beauty plus the traditionally low maintenance of Gold Seal Inlaid Linoleum. Stains, grease, grime wipe easily away. And tough, resilient "Sequin" provides quiet comfort underfoot . . . resists indentation . . . defies years of punishing traffic.

In addition to "Sequin," Gold Seal offers you a whole family of inlaid linoleum and resilient tile flooring materials—each with its own special uses and advantages. All are designed to please the most exacting client.

SPECIFICATIONS—1/8" "Sequin" linoleum 6' wide yard goods, 9" x 9" tile 1/8" gauge, burlap-backed. Install over suspended wood or suspended concrete subfloors (even over radiant heat). Available in: grey, green, dark brown, white multi, grey mix, taupe, beige and white with black. Also made in standard gauge for residential use—in 6 colors.

FOR THE LOOK THAT'S YEARS AHEAD
Gold Seal®
FLOORS AND WALLS

FOR HOME / BUSINESS / INSTITUTIONS

BY THE YARD AND TILES—Inlaid Linoleum • Nairon® Plastics • Vinylbest* Tile • Cork Tile • Rubber Tile • Asphalt Tile • PRINTED FLOOR AND WALL COVERINGS—Forecast® Vinyl • Congoleum® and Congowall® • *Trademark • SATISFACTION GUARANTEED OR YOUR MONEY BACK • CONGOLEUM-NAIRN INC., KEARNY, N. J.

Flour City

BALANCED DOORS

FEATURES

Door and frame are an integral unit.

No bulky projections on door or frame.

No cutouts for closers in head or floor of surrounding construction.

Opens easily; closes rapidly and quietly.

Folding arm action provides less projection onto sidewalk or into vestibule.

Hydraulic check and bumper.

Hold-open device.

Two speed adjustments.

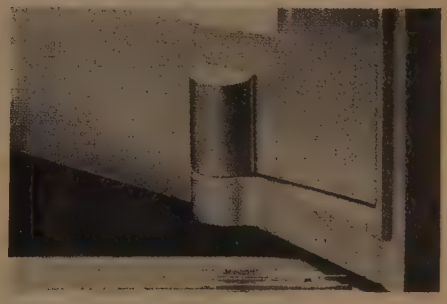
Door of welded construction throughout.

Panic exit devices can be used.

No customer maintenance of mechanical features.

Repairs by factory personnel.

CUSTOM FABRICATED from the finest materials available and erected by Flour City's own skilled erectors, this door will give years of convenient service. Flour City particularly recommends selection of the balanced door for large buildings—auditoriums, department stores, office buildings, churches, libraries and bank buildings—where the comfort and convenience of the user is a prime consideration. All Flour City balanced doors are equipped for two closing speeds. The initial closing operation is very rapid. The speed is checked in the last few inches, and the door closes slowly and quietly. Fast opening and closing reduces the load on heating and cooling systems as well as adding to the comfort of people near the door.



OPERATING ARMS are made of heavy bronze. Chrome plating meets Federal Specifications FF-H-106A.

REASONS FOR SPECIFYING FLOUR CITY BALANCED DOORS:

Produced by competent, experienced, engineering and production staffs from design to erection.

100% inspection of every part, including pressure testing of each hydraulic cylinder.

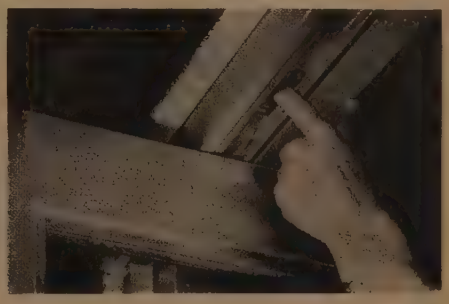
Hydraulic fluid of a viscosity to permit easy operation winter or summer.

A lubricant with a performance range of —100° F. to +250° F.

Erection by Flour City's skilled erection crews.

Factory representatives available when required.

The craftsmanship and integrity of a firm producing only architectural metalwork of quality since 1893.



PRESSURE with one finger operates the hold-open device. Door is easily released by opening it slightly more to disengage device.

THE FLOUR CITY ORNAMENTAL IRON COMPANY

2637 27TH AVENUE SOUTH • MINNEAPOLIS 6, MINNESOTA

1893 SIXTY-FIFTH ANNIVERSARY 1958

STANDARD BALANCED DOOR

Aluminum • Stainless Steel • Steel • Bronze • White Bronze

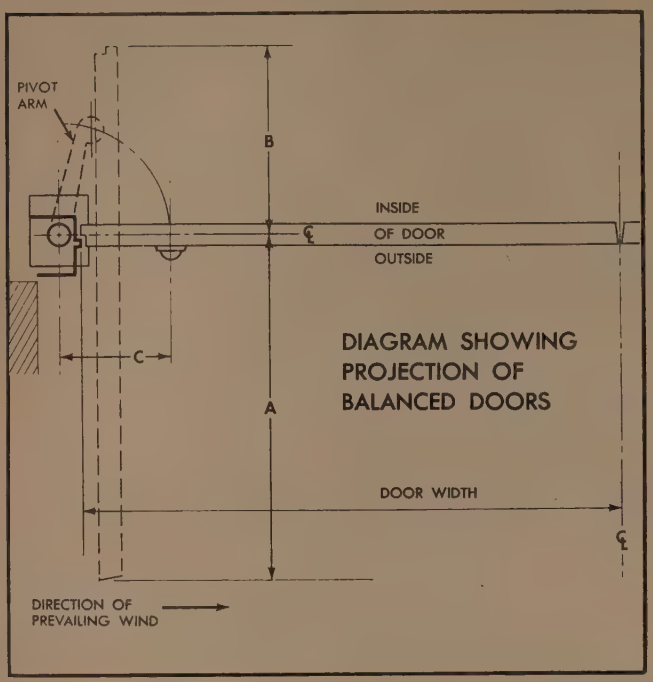


DIAGRAM SHOWING PROJECTION OF BALANCED DOORS

RECOMMENDED DOOR WIDTHS

DOOR WIDTH	A	B	C
30″	18¾″	11¼″	6¼″
31″	19¾″	11¼″	6¼″
32″	20¾″	11¼″	6¼″
33″	19⅞″	13⅛″	7⅛″
34″	20⅞″	13⅛″	7⅛″
35″	21⅞″	13⅛″	7⅛″
36″	22⅞″	13⅛″	7⅛″
37″	22⅛″	14⅞″	8″
38″	23⅛″	14⅞″	8″
39″	24⅛″	14⅞″	8″
40″	23¼″	16¾″	8⅞″
41″	24¼″	16¾″	8⅞″
42″	25¼″	16¾″	8⅞″
43″	26¼″	16¾″	8⅞″

One-quarter or Full Size Details on Request.

SPECIFICATIONS

GENERAL

Balanced doors (and sidelights) of the type and size shown on the plans shall be as manufactured by The Flour City Ornamental Iron Company. Doors and frames shall be furnished with all necessary hardware and anchors and shall be equipped with a hydraulic check, bumper, hold-open device and adjustment for two closing speeds.

MATERIAL

SERIES	MATERIAL	THICKNESS (door)	THICKNESS (frame)
BD 100A	Aluminum	.125″ Sheet or Extruded	.081″ min. Sheet; .093″ Extruded
BD 100B	Bronze	.064″ Sheet	.064″ Sheet
BD 100WB	White Bronze	.064″ Sheet	.064″ Sheet
BD 100S	Steel	.074″ Sheet	.062″ Sheet
BD 100SS	Stainless Steel	.062″ Sheet	.062″ Sheet

CONSTRUCTION

Frame: Frames shall consist of extruded or sheet material (as specified) applied to a steel sub-frame in the manufacturer's plant. One jamb section shall be removable for access to the torque tube.

Door: Doors shall be fabricated of extruded or sheet material (as specified) with top and bottom rails welded to the stiles.

HARDWARE

Push and pull bars, or plates, shall be Flour City's standard hardware (or as shown on the plans and specified). Lock schedule to meet various job conditions shall be submitted by the manufacturer for architect's approval.

THRESHOLDS

Thresholds shall be Flour City standard as follows:

Aluminum doors: Extruded aluminum or cast aluminum with abrasive surface. (Specify option).

Bronze doors: Extruded bronze or cast bronze with abrasive surface. (Specify option).

Steel doors: Specify.

Stainless steel doors: Extruded white bronze or cast white bronze with abrasive surface. (Specify option).

GLAZING PROVISIONS

Glass stops shall be on the interior side of the door. For aluminum doors a snap-on type shall be used; for other materials, channel stops assembled with screws.

FINISH

Finish of doors and frames shall match samples submitted to the architect by the manufacturer.

Finish for operating arms shall be as follows:

Aluminum doors: Dull chrome plated
Bronze doors: Bronze plated
White bronze doors: Nickel plated
Steel doors: As specified
Stainless steel doors: Nickel plated

SHOP DRAWINGS

Shop drawings shall be submitted, in triplicate, for architect's approval. Drawings shall show sections of doors and frames, details of construction, hardware, and methods of anchoring frame in the opening.

ERECTION

All balanced doors shall be erected by men employed by the door manufacturer, skilled in this type of work, and shall include final adjustment for proper and easy operation of the door after glazing.

GUARANTEE

Doors shall be guaranteed for a period of one year against defective material and workmanship.

GLAZING, GROUTING AND CAULKING

Glass and glazing, grouting and caulking shall be furnished under another contract.

THE FLOUR CITY ORNAMENTAL IRON COMPANY
2637 27TH AVENUE SOUTH • MINNEAPOLIS 6, MINNESOTA
1893 SIXTY-FIFTH ANNIVERSARY 1958
MEMBER

Aluminum

REVERSIBLE WINDOW

Flour City RA-60

FEATURES

- Full 360 degrees rotation. Automatic locking at both jambs at 180 degrees position.
- Heavy aluminum sections with minimum wall section of $\frac{1}{8}$" thickness.
- Tubular sill section.
- Stainless steel strikes.
- Key operated lock bolt.
- Keyless spring latch.
- Two strips of vinyl weatherstrip keyed into frame.
- Square corners on sash and weatherstrip.
- Both sides of glass can be washed from interior of the room.
- Designed to be opened only by window washer.
- Stay rods provided for emergency ventilation.
- Ideal window for curtain walls on high-rise buildings. See Sweet's File 3a/FLo.

SEE SWEET'S FILE 17a/FLo FOR OTHER WINDOW DETAILS

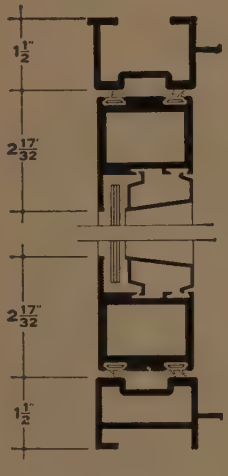
HARDWARE

Simple and sturdy lock and key guarantees long trouble-free life.

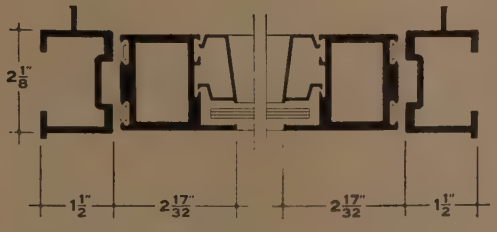
Release latch for returning window to normal position.

Aluminum corner blocks and sealant inserted under pneumatic pressure create rigid and leak-proof corners.

Two continuous one-piece vinyl weatherstrips with double fins seal against air and water infiltration. Corners are mitered and heat sealed.



VERTICAL SECTION 3" : 1'-0"



PLAN SECTION 3" : 1'-0"

"Full size details on request"

MEMBER

THE FLOUR CITY ORNAMENTAL IRON COMPANY

2637 27TH AVENUE SOUTH • MINNEAPOLIS 6, MINNESOTA

1893 SIXTY-FIFTH ANNIVERSARY 1958

SPECIFICATIONS FOR REVERSIBLE WINDOW RA-60

GENERAL

Aluminum reversible windows shall be FLOUR CITY RA-60 reversible windows, furnished with all necessary hardware, anchors, and miscellaneous equipment as specified below.

OPERATION

Window washer's key shall be used only to initially unlock sash, the cycle of operation being completed without further use of the key. Sash shall pivot 360 degrees in one direction, locking both stiles automatically at 180 degrees to permit washing exterior face from the interior. Thumb pressure on latch release shall permit sash to complete the cycle to original position and lock automatically without use of key.

MATERIAL

Frame and Sash: Extruded aluminum, 6063-T5 alloy, not less than ⅛″ thick.

Glazing Mouldings: Extruded aluminum, 6063-T6 alloy, not less than .050″ thick.

CONSTRUCTION

Frame: Assembled by welding or mechanical means to make permanently watertight joints. Mechanical joints shall be keyed.

Sash: Stiles and horizontal rails shall be tubular construction, assembled by welding or mechanical means to make permanently watertight joints. Aluminum reinforcing blocks shall be used in each corner.

Glazing Beads: Snap-on type with vertical mouldings running the full length of the glazing area, and horizontal mouldings neatly coped between verticals.

HARDWARE

All operating hardware, exposed or concealed, shall be of dull chrome plated bronze, and stainless steel. Stainless steel pivots shall be provided at top and bottom of sash with sash load carried on stainless steel washers and bronze bushings. A key operated lock bolt shall be provided to lock into stainless steel strikes in either jamb. To prevent deflection of sash due to outside wind pressure when the window is in normal closed position a spring latch shall be provided in the left hand sash stile designed to automatically retract when window is rotated in clockwise direction. Furnish window washers' keys as necessary. Stay rods for holding sash open approximately six inches shall be included for each window.

WEATHERSTRIP

Two rows of multiple ribbed vinyl plastic weatherstrip running continuously around all four sides of sash and keyed into extruded grooves at edge of sash member shall be provided. Weatherstrip shall be arranged to pass latch, lock and pivots without interruption and be easily removed and replaced.

AIR INFILTRATION

Windows shall be submitted for test to a recognized testing laboratory. Air infiltration, after opening and closing the window 10,000 times, shall not exceed .070 cubic feet of air per minute, per foot of sash perimeter when the window is subjected to a static air pressure equivalent to a wind velocity of 50 miles per hour.

FINISH

The exposed surfaces of all aluminum sash and frames shall be cleaned to make them reasonably uniform in color and free from scratches and other serious surface blemishes and a coat of clear methacrylate lacquer resistant to alkaline mortar or plaster shall be applied by the Window Manufacturer before shipment from the factory.

ALUMILITE FINISH

(*Furnished at additional cost*)

All windows shall be given an alumilite finish in accordance with specifications and requirements of Aluminum Company of America Specifications No. 204 (Special satin or buffed finishes are available and should be specified if required.)

WATER INFILTRATION

Windows shall be tested for water leakage. No water shall be apparent along the vinyl weatherstrip after a 12 minute test. This test shall consist of a continuous curtain of water flowing over the exterior side of the window under air pressure equivalent to a 100 mile per hour wind.

PRODUCTION TESTS

Air and water tests shall be made with the first production window and shall meet the architect's approval. Subsequent tests of production-run windows shall be made and certified test reports shall be furnished to the architect.

TEST WAIVER

The Architect may, but shall not be required to, waive the above tests, provided the Window Manufacturer can furnish certified reports of tests made by an approved testing laboratory showing that windows previously manufactured by him, as the same type as are being furnished for this project, have met or exceed the requirements hereinbefore specified.

SHOP DRAWINGS

Window Manufacturer shall submit shop drawings, in triplicate, for approval, showing elevations of windows, full size sections of sash and frames, details of construction, hardware and method of anchoring window frame in opening.

ERECTION

All aluminum windows shall be erected by men employed by the Window Manufacturer, skilled in this type of work and shall include final adjustment for proper counter-balancing and easy operation of the sash after glazing. This shall also include the removal of the protective coating applied by the Window Manufacturer before shipment from the factory.

GLAZING

Glazing shall be included under another contract. The Glazing Contractor shall furnish an approved glazing compound of composition particularly adapted for use with aluminum windows. The Glazing Contractor shall, before commencing glazing, remove from the glazing surfaces of aluminum sash any material to which the glazing compound will not readily adhere.

The glass in the sash shall be properly blocked by the Glazing Contractor in accordance with instructions issued by the Window Manufacturer.

GROUTING AND CAULKING

Work of this nature shall be included under another contract.

GUARANTEE

The window shall be guaranteed for a period of two (2) years against defective workmanship and material. The weatherstripping shall be guaranteed for a period of five (5) years.

NOTE: SPECIFICATIONS FOR BRONZE AND STAINLESS STEEL AVAILABLE ON APPLICATION

THE FLOUR CITY ORNAMENTAL IRON COMPANY

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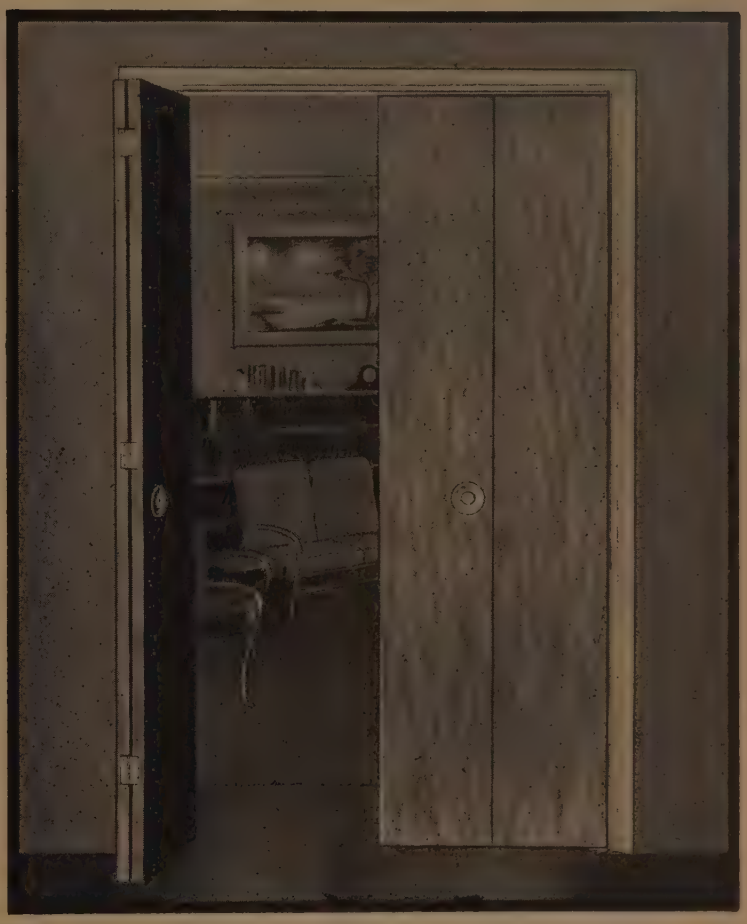
1893 SIXTY-FIFTH ANNIVERSARY 1958

MEMBER

New Stanley bi-fold hardware for extra wall and floor space

Bi-fold hardware gives you doors that fold back together, require half the space of swinging doors but permit full access to rooms or closets. You take advantage of all these features:

1. You specify the type of door you prefer . . . wood or composition . . . louvered, flush or paneled.
2. Doors are whisper-quiet—no metal-to-metal contact—nylon pivots and guides.
3. No bottom track is required—a unique device holds all doors firmly aligned. Patent applied for.
4. Hardware is designed for all standard finished openings from 2′ 0″ to 6′ 0″.
5. One-man installations are made quickly and easily.



No. 2987 for passage doors

The hardware is concealed on both sides of door.

Jamb-mounted lower pivot permits installation over slab or terrazzo floors or carpeting. No. 2987 fits all doors from 1″ to 1⅜″ thick and can be adjusted laterally or vertically for perfect alignment. A unique snugger holds doors firmly closed so they can't rattle or blow open. Doors can be removed or rehung in seconds.

No. 2980 for closet doors

The hardware is surface mounted for greater economy.

No. 2980 hardware is also easy to install, adjust, remove and rehang. It fits all doors from ¾″ to 1⅜″ thick. The self-facing guide track takes any style trim when reversed.

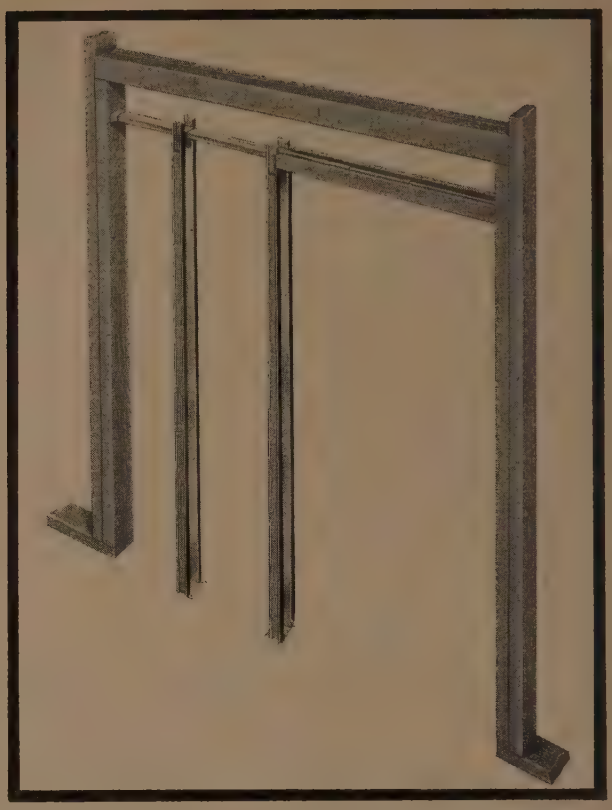
Please turn page for information about Stanley's complete line of sliding door hardware.

Both sets packed for two-panel doors (2′ 0″, 2′ 6″, 3′ 0″ openings) and four-panel doors (4′ 0″, 5′ 0″, 6′ 0″ openings).

STANLEY

AIA FILE NO. 27-B

Stanley sliding door hardware

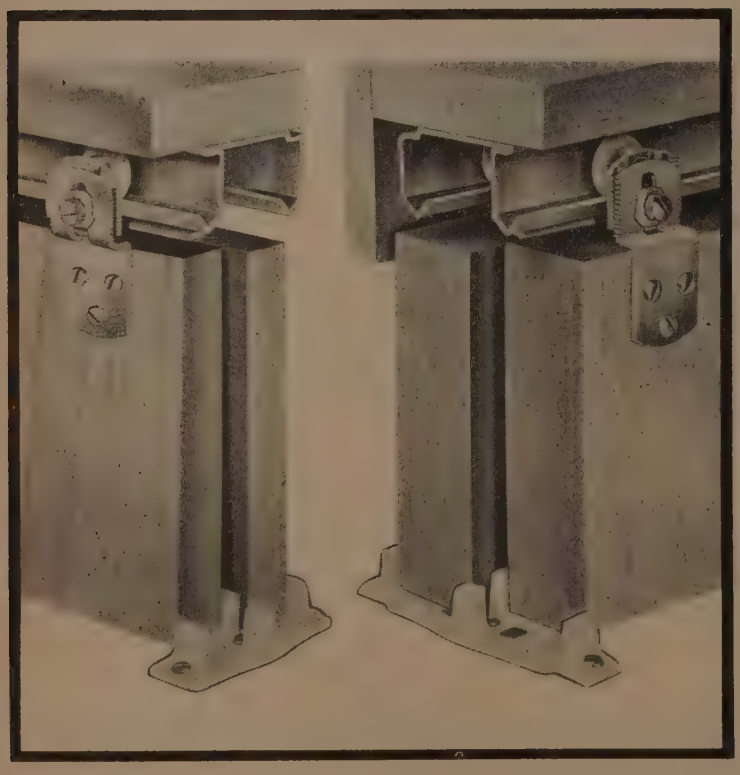


No. 2825 for pocket frames

It's adjustable—just one set of hardware fits all openings . . . for doors

2′ 0″ to 3′ 0″ wide
6′ 6″ and 6′ 8″ high
¾″ to 1¾″ thick

Adjustments can be made even after trim is in place. Stanley's exclusive telescopic track makes No. 2825 right for every job. It's impossible for builders to order—or for dealers to deliver—the "wrong" size. Maximum pre-assembly enables one man to easily install No. 2825 for wet or dry wall construction—in less than 20 minutes.



No. 2800 for by-passing doors

Hanger permits up to ⅜″ vertical adjustments without loosening door screws.

Here is the hardware that has revolutionized and simplified installation of all sliding doors. 2800 introduced the easy vertical adjustments without loosening door screws or marring the door in any way. 2800 was also *the first hardware with a reversible hanger* and adjustable floor guides to fit both ¾″ and 1⅜″ doors.

See Stanley for the world's largest selection of trim, available in all standard finishes.

For details about Stanley's complete line of bi-folding and sliding door hardware, please write Stanley Hardware, Division of The Stanley Works, New Britain, Conn.

AMERICA BUILDS BETTER AND LIVES BETTER WITH STANLEY

STANLEY

This famous trademark distinguishes over 20,000 quality products of The Stanley Works—hand and electric tools • builders and industrial hardware • drapery hardware • door controls • aluminum windows • stampings • springs • coatings • strip steel • steel strapping—made in 24 plants in the United States, Canada, England and Germany.

We acknowledge the assistance of The American Institute of Architects in editing the subject matter and form of presentation.

Algoma Grade Weldwood plain sliced walnut, installed at Equitable Life Assurance Society offices in Milwaukee, Wisc., by Wagner & Boek. Architect: Office of Fritz Von Grossmann.

What does the designation, "Algoma Grade," mean in hardwood plywood paneling?

Over the years, "Algoma Grade" has become almost generic for "finest quality" in hardwood paneling. The phrase is often written into architectural specifications when flawless craftsmanship, exceptionally uniform color, and expertly center-matched veneers are required in wood paneling.

At Algoma, Wisconsin, United States Plywood Corporation produces Algoma Grade Weldwood Paneling, utilizing machinery and laminating procedures that set a standard for the industry. Here choice woods, precision equipment, and the hand of master craftsmen result in a superbly beautiful panel whose excellence is known the world over.

Algoma Grade Weldwood Paneling is also furnished sequence-matched in selected woods and in fire-resistant plywood panels. You can specify Algoma Grade Weldwood Paneling in a wide range of stock panel sizes, and in special sizes on order, in birch; maple; benge; walnut; oak; African, Honduras, and Philippine mahogany; Korina®; cherry; and elm, as well as other beautiful woods.

How to specify Algoma Grade Weldwood Paneling

Short Specification: Weldwood Plywood shall be Algoma Grade as manufactured by United States Plywood Corporation.

Long Specification: Plywood shall be Algoma Grade stock panels, as manufactured by United States Plywood Corporation. Faces shall be of one or more pieces of veneer matched for color and grain at the joints to produce continuity of character and balanced design. Faces shall be free of open joints, face depressions, glue stains, or other manufacturing defects. Faces shall be selected for figure, selected for color, or unselected for color, as specified, but shall not contain ruptured grain, doze or shake and shall otherwise equal or exceed the quality requirements of the best grade of that species listed by U. S. Department of Commerce Commercial Standards CS 35-49 or latest revision thereof.

Backs on G1S plywood shall be a species and thickness to balance face veneers and shall be CS 35-49 grade 4 or better. Plywood shall be sanded both sides and fine belt sanded on the face. Inner plies shall be sound, with tight joints and of thickness required to produce balanced construction in over-all thickness as specified. Glue bond shall be Urea Formaldehyde hot press method unless otherwise specified. Plywood thickness shall be as specified with tolerance of plus 0″ or minus 1/32″ and trimmed to specified sizes plus or minus 1/32″.

Algoma Grade
WELDWOOD PLYWOOD
MOISTURE RESISTANT
FOR INTERIOR USE
For a better finish use Firzite and Satinlac. Send for free Finishing Booklet.
GUARANTEE: Weldwood plywood for interior use is guaranteed for the life of the building in which it is installed.

As stated on the label affixed to every panel, Algoma Grade Weldwood Paneling is guaranteed for the life of the installation.

Weldwood® Weldwood

Algoma Grade WOOD PANELING

Weldwood Movable Partitions, installed with ½-inch clearance below luminous ceiling, follow the curve of this corridor in the new home office of Medusa Portland Cement Company, Cleveland. Architect: Ernest Payer. Wood-faced Weldwood Movable Partitions give all the advantages of wood paneling, yet permit you to change office layouts overnight.

New partitions, new types of panels by Weldwood offer a lifetime of beauty

Weldwood Porc-Lin-Ply® for store fronts gives lifetime beauty. Steel-backed panels with hard porcelain-enamel faces are moisture-resistant, won't fade, craze, or crack. Semi-matte finish panels in 9 colors are easily wiped clean, offer low-cost, easy installation. Shown: Snow Drift White Porc-Lin-Ply, fascia of soffits on the new Shopping Center, Prospect Heights, Ill. Arch: Jens Jensen.

Durable, *adaptable* Weldwood Movable Partitions are now available in two new low-maintenance types, in addition to familiar hardwood Weldwood Movable Partitions.

Weldwood Kalistron® Partition Panels. Kalistron, the highly scuff-resistant vinyl sheeting with beautiful color permanently fused to the underside, is bonded to hardwood faced movable partitions. The incombustible, inert Weldrok® mineral core deadens sound, won't buckle or warp. Ideal for heavy-duty areas such as corridors and showrooms.

Weldwood Novowall® Partition Panels. Wherever warp-free stability is essential in budget installations, this 1¾-inch, 3-ply engineered partition is recommended. Face plies of selected wood flakes and the wood chip core are resin-impregnated and bonded under heat and pressure. Available in wood mosaic face, or in special Premium Grade Novowall which presents an excellent smooth paint surface.

All Weldwood Movable Partitions feature the unique metal key connector system for complete freedom of design and future redesign of room areas.

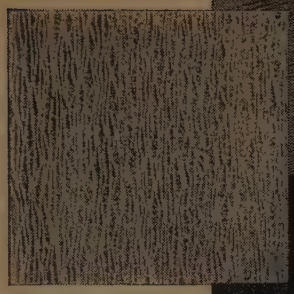
See our catalogs in Sweet's. We shall be glad to have a Weldwood Architects' Service Representative call on you. Or, for free booklets, "Weldwood Movable Partitions" (#1764), "Weldwood Porc-Lin-Ply" (#1761), or "The Weldwood Catalog" (1640F) write Dept. TBPC-3-58.

Weldwood® Weldwood®

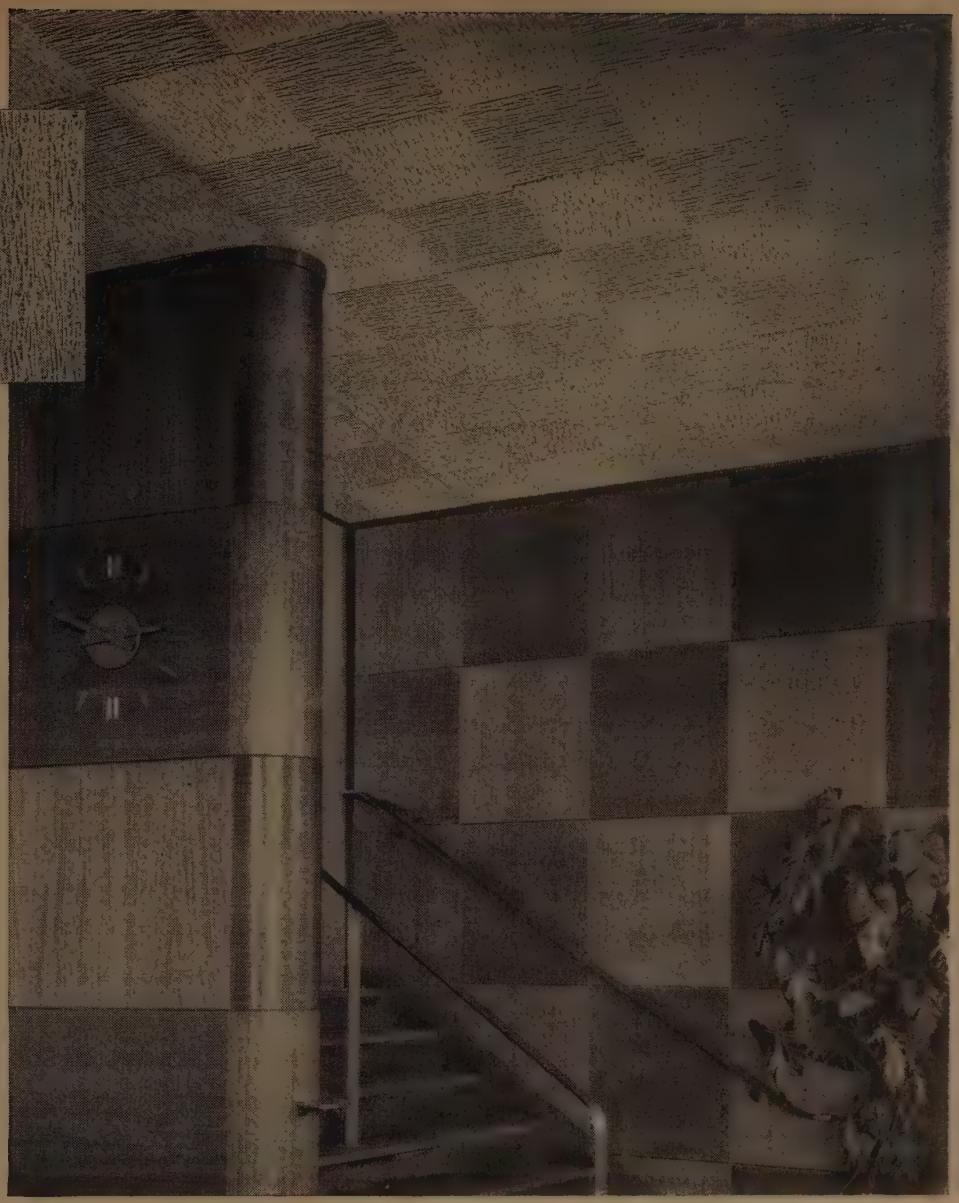
MOVABLE PARTITIONS • PORC-LIN-PLY

UNITED STATES PLYWOOD CORPORATION

55 West 44th Street, New York 36, N. Y.



ANNOUNCING A NEW CONCEPT IN CEILING DESIGN



Armstrong EMBOSSED TRAVERTONE

The latest addition to high-style ceilings is Armstrong Embossed Travertone, a striking new acoustical material. By varying the depths of embossing, Armstrong stylists have designed a soft, mellow ceiling—highlighted by thin, wavering relief surfaces. This deep, rich texture makes Embossed Travertone ideally suited for areas where exceptional overhead beauty is desired.

Armstrong Travertone is a mineral wool material that will not support combustion (Class A under Federal Specifications SS-A-118b). It has excellent sound-absorbing qualities, can be cleaned by conventional methods, and can be repainted without appreciable loss of acoustical efficiency.

Armstrong ACOUSTICAL CEILINGS

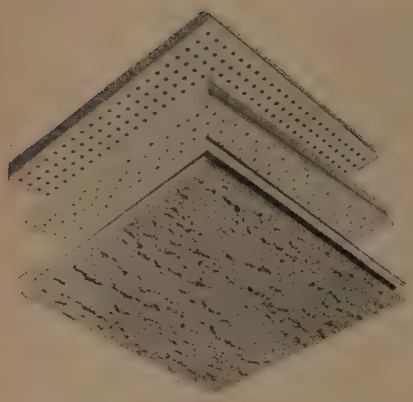
Travertone • Crestone • Minatone • Corkoustic • Cushiontone
Custom Minaboard • Arrestone

AIA FILE NO. 39-B

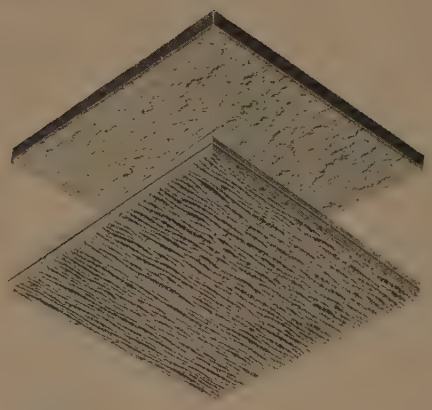
There is an Armstrong Acoustical Ceiling for every job need

The complete line of Armstrong acoustical materials allows you to select from a wide range of product features. You can get the best possible combination of cost, fire-safety, acoustical efficiency, appearance, insulation value, and light reflectance to fit each specific acoustical ceiling requirement.

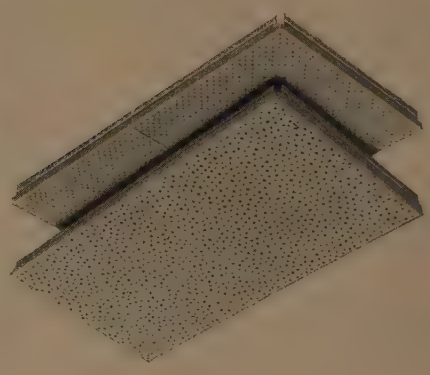
Your Armstrong Acoustical Contractor will gladly give you practical assistance in making the proper selection. For the free booklet, "Armstrong Acoustical Ceilings," fill out the postage-free reply card in the back of this issue.



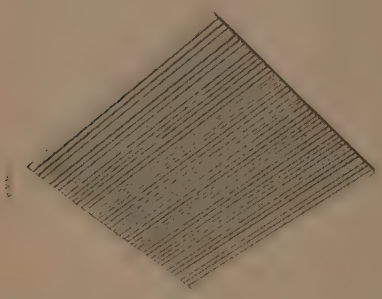
CUSHIONTONE. An economical wood-fiber tile, factory finished with a washable white paint. Available in either Class C (Slow-Burning) or Class D finish. Now available in distinctive textured design, in addition to straight-row and full random perforated designs. Available in butt-edge or tongue-and-groove joint detail.



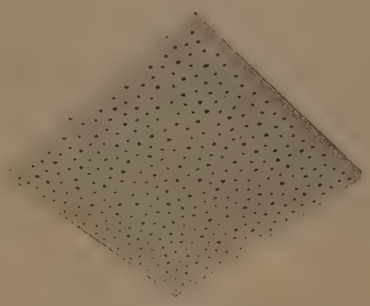
TRAVERTONE. A fissured mineral-fiber tile, finished with a washable white paint and available with beveled or square edges. Rated Class A (Incombustible) under Federal Specifications SS-A-118b. Carries the Underwriters' Laboratories, Inc., label. Now available in new embossed design.



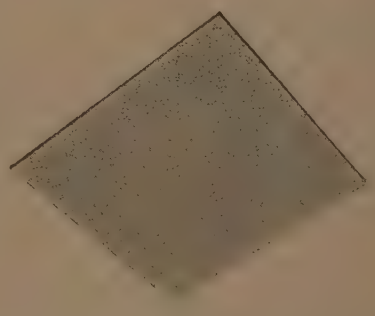
ARRESTONE. Perforated metal pan units backed by mineral wool pads. Pans are 26-gauge cold-rolled steel with baked-on white enamel finish. Also available in enameled, zinc-coated steel and enameled or bare mill finish aluminum. Rated Class A (Incombustible) (Fed. Spec. SS-A-118b). In straight-row or full random design.



CRESTONE. A mineral-fiber tile, striated to create an interesting ridge-and-valley effect. May be installed in a variety of interesting patterns for truly distinctive ceiling effects. Rated Class A (Incombustible) under Federal Specifications SS-A-118b. Carries the Underwriters' Label.

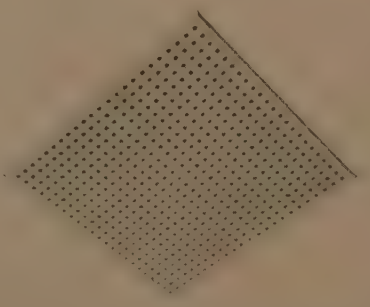


MINATONE. A perforated mineral-fiber tile in full random design. Washable white paint finish on face and bevels. Rated Class A (Incombustible) under Federal Specifications SS-A-118b. Carries the Underwriters' Laboratories, Inc., label.

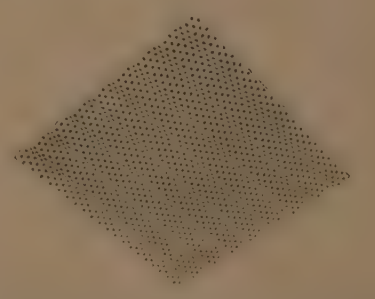


CUSTOM MINABOARD. Mineral-fiber lay-in board for exposed grid installations. Special density and composition eliminate "breathing," provide excellent resistance to sound transmission. Rated Class A (Incombustible). Washable, white paint finish. Carries Underwriters' Label.

CORKOUSTIC. A textured pure cork tile with unusual resistance to excessive moisture. Washable white paint finish. Rated Class C (Slow-Burning) under Federal Specifications SS-A-118b.



PERFORATED ASBESTOS BOARD. Large perforated facing units installed with glass wool backing pads. Beveled or square edges. Unpainted. Rated Class A (Incombustible) under Fed. Spec. SS-A-118b.



PERFORATED CORRUGATED ALUMINUM. Large, durable aluminum facing units installed with mineral wool or glass wool backing pads.

We acknowledge the assistance of The American Institute of Architects in editing the subject matter and form of presentation.

mills new aluminum frame movable partitions
open up a new field of space articulation

THE MILLS COMPANY 987 WAYSIDE ROAD CLEVELAND 10, OHIO

MILLS MOVABLE METAL WALLS

This practical 68-page catalog contains detailed technical information, specifications, 1/4" scale drawings and photographs of all types of Mills Movable Walls, including a new series of aluminum partitions based on a new concept in modular movable interiors.

MILLS METAL COMPARTMENTS

The 20-page catalog contains complete information, specifications, detail drawings, typical layouts and actual color samples on Mills Toilet Compartments, (including new Junior Height Compartments), shower and dressing rooms, shower units, hospital cubicles.

MILLS WALLS FOR SCHOOLS

This 4-page folder shows how Mills Movable Walls provide Space Control in a typically modern school. Detailed floor plans of a functional new high school indicate how and where Mills Movable Walls are used to keep its interiors permanently efficient.

MILLS WALLS—SPACE CONTROL

Space Control—the constant and ready adaptability of office layouts to inevitable changes in space requirements—is the theme of this 4-page folder, summarizing the advantages achieved through the use of flexible interiors.

Copies of these catalogs and folders may be obtained by using the Mills Co. Card in the Reply Card Section.

This is Terrazzo Chip... in KENTILE® Solid Vinyl Tile

... the only resilient tile flooring that captures the monolithic character of troweled-on Terrazzo. In rich, matched pairs for contrast and harmony.

KENTILE FLOORS

available in Solid Vinyl, Vinyl Asbestos, Cushion-back Vinyl, Asphalt, Cork and Rubber Tile...over 175 decorator colors!

SPECIFICATIONS:

SIZE:
9" x 9"

THICKNESSES:
.080", 1/8"

COLORS:
(In the order shown)
Tennessee
Dark Tennessee
Dark Sandstone
Sandstone
Dark Granite
Granite

These are Woodgrain Planks in KENTILE® Solid Vinyl

...with all the polished beauty and distinctive shadings of hardwood -- yet so much easier to care for! Greaseproof. No dust-collecting open seams. No sanding. No varnishing.

KENTILE FLOORS

available in Solid Vinyl, Vinyl Asbestos, Cushion-back Vinyl, Asphalt, Cork and Rubber Tile... over 175 decorator colors!

SPECIFICATIONS:

SIZE:
4" x 36"

THICKNESSES:
.080", 1/8"

COLORS:
Random Shades in Birch
Limed Oak and Teak; also Mahogany (not shown)

ra-modern Main Kitchen at St. Elizabeth's Hospital in Belleville, Illinois. Architect nry R. Slaby of Milwaukee, Wisconsin, specified interiors of Natco Ceramic aze Vitritile and exteriors of Natco Buff Roman Face Brick. Contractor was uer Brothers Construction Company of Belleville.

St. Elizabeth's Hospital—where Corridors, Laundry, Kitchens, Power Plant, Laboratories, Wash Rooms, Lockers and Food Storage Rooms, Cafeteria—even the Chapel *have in always new look, thanks to NATCO Ceramic Glaze Vitritile*

St. Elizabeth's Hospital at Belleville, Illinois, presents a striking example of the use of two major products. The exterior walls are Natco Buff Roman Face Brick while interiors feature Natco Ceramic Glaze Vitritile combining permanence and beauty in a wide range of locations.

Builders find Natco Ceramic Glaze Vitritile also offers other important features in a single building material. It makes sound, fire-proof structural walls and partitions, plus a colorful wear-resistant interior finish in a single operation . . . at one cost. Years after installation it will retain its new look because soap and water maintenance is all it ever needs.

Finally, Natco Vitritile is available in 21 standard colors (including the new speckled glaze) to permit selection of the shade needed for pleasing appearance and proper lighting.

SIZES AND SHAPES

Series	Nominal Face Size	Tile Face Size	Nominal Thickness
"8W"	8" x 16"	7¾" x 15¾"	2", 4"
"6T"	5⅓" x 12"	5⅛" x 11¾"	2", 4", 6", 8"
"4D"	5⅓" x 8"	5⅛" x 7¾"	2", 4", 6", 8"

NATCO
CORPORATION

FTI STRUCTURAL

GENERAL OFFICES: 327 Fifth Avenue, Pittsburgh 22, Pa.
BRANCH SALES OFFICES: Boston • Chicago • Detroit • New York • Philadelphia • Pittsburgh • Syracuse • Birmingham, Alabama • Brazil, Indiana
IN CANADA: Natco Clay Products Ltd., Toronto

NATCO QUALITY CLAY PRODUCTS SINCE 1889

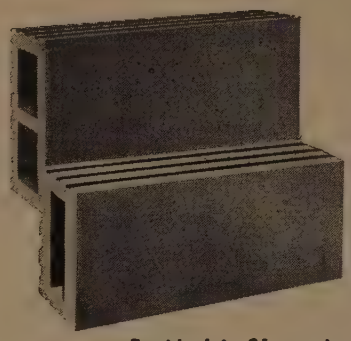
NATCO STRUCTURAL CLAY PRODUCTS

fireproof . . . load-bearing . . . maintenance-free
sanitary . . . permanently beautiful

A complete line of Natco Structural Clay Products is available for every type of modern building. You can select from the Natco line with complete assurance of high quality and dependable service.

Natco structural clay products are specified in leading buildings everywhere for lifetime beauty, fire-safety, and complete protection and durability. All Natco Products are maintenance-free—require no painting or repairs, ever.

If your job requirements demand a building material that assures minimum maintenance and perfect sanitary conditions, check with Natco. Write, wire or phone for more detailed information on the versatile Natco line.



NATCO VITRITILE

Structural clay units, produced for use where an attractive, cheerful ceramic glaze interior finish is desired in walls, partitions and veneers. Natco Vitritile is impervious to acids, resistant to the hardest wear and easy to keep spotless. Modular designed for greater flexibility. Write for catalogs 8W-257, 6T-1155, 4D-1255.

Furnished in 21 standard ceramic glaze colors including mottled effects and the new speckled glaze finish. Nominal face sizes: "8W" Series 8" x 16", "6T" Series 5⅓" x 12", "4D" Series 5⅓" x 8". Write for shape catalogs.

NATCO UNIWALL FACING TILE

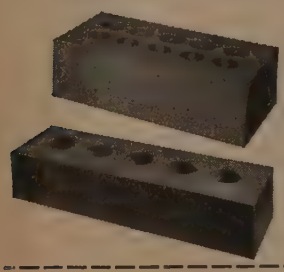
for beautiful single unit walls. Finished inside and out. Natco Uniwall is a quality facing tile produced in modular dimensions yet equally adaptable to non-modular construction. Write for descriptive literature UW-100-2.

Tile Face Size 3⅝" x 11⅝" x 7¾" thick, Buff Range Rugg-Tex Exterior Finish Ceramic Glaze Interior Finish

NATCO DRI-SPEEDWALL TILE

for strong, dry load-bearing walls. No painting or repairs . . . no shrinking or cracking. Quick and easy to lay—saves in erection costs. Builds nominal 8" wall. Write for Catalog Dri-18C.

Full stretcher units, nominal size—8" x 5⅓" x 12" Colors: Buff Unglazed, Manganese Spot and Red Textured



NATCO Face Brick . . .

Norman • Roman • SCR • Standard

The beauty and variety of NATCO Face Brick lend strength and character to any building. The nominal 12" length of Norman, Roman and SCR bricks are preferred where strong horizontal lines are desired . . . larger sizes promote economies in labor during erection.

TABLE OF BRICK SIZES, INCHES

	Height	Depth	Length
NORMAN	2¼	3½	11½*
	2¼	3⅝	11⅝†
SCR	2¼	5½	11½*
ROMAN	1⅝	3⅝	11⅝‡
STANDARD	2¼	3¾	8ᵛ

*Red †Buff and Gray ‡Red, Buff and Gray
ᵛRed, Buff, Gray, Ceramic Velour & Speckled Finishes

**Also available now in ceramic glaze velour textured brick in 11 attractive colors.

OTHER NATCO CLAY PRODUCTS: Tex Dri-wall Tile • Speed-a-backer Tile • Speedtile • Bakup Tile • Segmentile and Silo Tile • Unglazed Facing Tile • Ceramic Glaze Vitiritile "8W," "6T" and "4D" Series • Ceramic Glaze Vitribrik, "4S" Series • Radiantile • Patio Tile • Stairtread Tile • Natcoflor Combination Floor Tile • Clay Flue Lining • Clay Drain Tile • Clay Sewer Pipe • Wall Coping Tile • Clay Stove Liners • Flashing Tile • Chemtile • Kiln Floor Brick • *Write for General Catalogs S-57 and SB-57*

NATCO

NATCO CORPORATION—GENERAL OFFICES: 327 FIFTH AVENUE, PITTSBURGH 22, PA., TELEPHONE GRANT 1-9370

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Syracuse 3, N.Y., 1045 James Street, Tel. Syracuse 9-8222

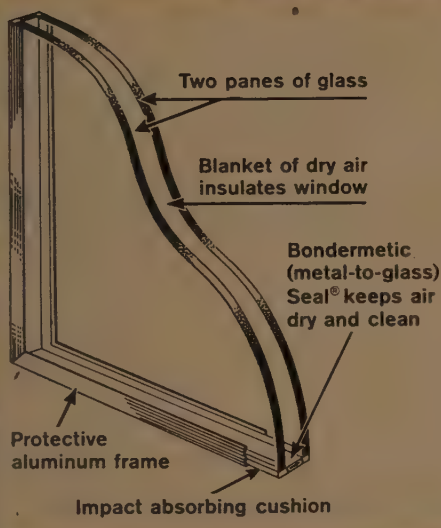
CLAY PIPE SALES DIVISION
P.O. Box 207, Brazil, Indiana, Tel. Brazil 2347

IN CANADA
Natco Clay Products Limited, 57 Bloor Street West, Toronto 5, Ont.

NATCO QUALITY CLAY PRODUCTS SINCE 1889

BONDERMETIC SEAL® *Thermopane*® HAS A NEW CUSHIONED ALUMINUM FRAME!

Makes *THERMOPANE* stronger, easier to handle and to install!


Two panes of glass
Blanket of dry air insulates window
Bondermetic (metal-to-glass) Seal® keeps air dry and clean
Protective aluminum frame
Impact absorbing cushion

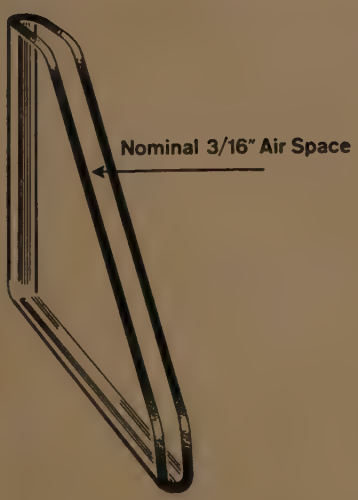
recommended for all window areas, window walls and sliding glass doors

Now, *Thermopane* provides the important advantages of the *Bondermetic Seal plus* an impact-absorbing cushioned frame.

The exclusive time-proven, metal-to-glass seal prevents infiltration of moisture and dust into the dehydrated, insulating air space.

In this new *Thermopane*, a strong aluminum frame covers the glass edges which are clean-cut—not ground—and therefore are stronger. The frame makes handling and installation easier, protects glass edges and corners from damage.

NEW GLASSEAL® *Thermopane*® SETS NEW QUALITY STANDARDS FOR ALL-GLASS INSULATING UNITS!



recommended for standard size, pre-glazed window sash, wood or metal

L·O·F's new GlasSeal *Thermopane* is made of DSA sheet glass (double-strength, "A" quality window glass). The uniformly rounded, smooth, true edges make it easier and faster to glaze.

The dehydration hole is located on the edge, out of view and when glazed is covered by the sash. It is not exposed so there is no danger of damage during window cleaning.

Now, sash delivered to the job pre-glazed with GlasSeal *Thermopane* make it easier to provide insulated windows throughout . . . to make houses and buildings more comfortable in winter and summer . . . to reduce heating and air-conditioning costs!

See next page for technical information.

LIBBEY·OWENS·FORD

a Great Name in Glass

TECHNICAL INFORMATION

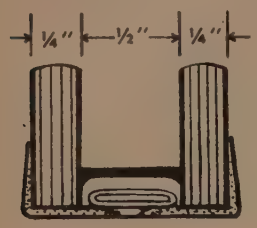
CUSHION-FRAMED *Thermopane* WITH BONDERMETIC SEAL

½-INCH

Two lights of ⅛″ polished plate glass or DSA window glass with ¼″ air space —57 standard sizes.

Thermopane made with DSA Glass is economical double-glazing. While made with the finest quality window glass, it does not provide the clarity of vision and good exterior appearance attained with polished plate glass.

½-inch *Thermopane* made of two lights of ⅛″ polished plate glass with ¼″ air space provides better vision and finer appearance in homes and other buildings.



1-INCH

Two lights of ¼″ polished plate glass with ½″ air space—56 standard sizes. This *Thermopane* provides excellent thermal insulation, combined with the clarity of vision that you get with plate glass. Ideal for picture windows and window walls.

PERFORMANCE DATA

As compared to single glass, heat loss through windows is reduced 44% by using insulating glass that has a ¼″ air space. With a ½″ air space, heat loss is reduced 50%.

The over-all heat transmission coefficient U varies with the ranges of temperature at which it is determined. For most practical heat loss calculations, coefficient U is the value determined at 10 degrees outside temperature, 70 degrees inside temperature, 15 mph outside air velocity, and 0.25 mph average inside air velocity.

Kind of Glass	Glass Thickness	U Value	
Single Glass	⅛″	1.16	
	¼″	1.15	
Thermopane Insulating Glass	⅛″ or ¼″	¼″ air space .65	½″ air space .58

SOUND INSULATION

Thermopane also reduces sound transmission, a great virtue in noisy locations. Units 1″ thick reduce noise transmission 44% compared with ¼″ thick single glass.

KINDS AND THICKNESSES OF GLASS

	Kind	Thickness
Libbey·Owens·Ford	Sheet (Window Glass)—*D.S.A. ("A" quality)	3/16″
	Polished Plate—Regular	⅛″, ¼″
	Parallel·O·Grey®	¼″
	Heat Absorbing	⅛″, ¼″
	Tuf-flex®	¼″
Blue Ridge	Plain Patterned—Flutex®, Hammered, Velvex®, AKLO Hammered	⅛″, 7/32″ ⅛″, ¼″

*Single strength or picture glass cannot be used.

GLAZING INFORMATION

Thermopane can be used in standard types of window sash and sliding doors. Since *Thermopane* is a factory-sealed insulating glass unit and is subject to movement due to changes of temperature and barometric pressure, adequate provision should be made for expansion and contraction. An approved cushioning material must be used so there is no contact between the sash and glass at any point. For detailed glazing information, ask for *Thermopane* Manual. The contractor, architect and building owner should assume responsibility in seeing that glazing instructions are followed and *not accept the job if they haven't been.*

GLASSEAL *Thermopane*

GlasSeal *Thermopane* is a factory-fabricated insulating unit. It cannot be cut or altered in any way. The smooth, clean edges make units easy to glaze. Glazing information available upon request.

STANDARD SIZES

Now available in five standard sizes: 45½″ x 25½″, 42½″ x 22½″, 36″ x 24″, 34 11/16″ x 22 11/16″, 32″ x 16″.

Special sizes can be fabricated in production run quantities of 500 units or more, within the size limitations stated at right.

SIZE LIMITATIONS

Dimensions in one direction cannot be less than 14″ or more than 38″, and not over 62″ in the other direction. Total area of unit cannot exceed 1,440 sq. in.

Altitude limitations—not over 3,000 feet.

KIND OF GLASS

GlasSeal *Thermopane* is available only in DSA Sheet Glass with a nominal 3/16″ air space. Total thickness of units, .450″ ± .050″.

L·O·F GLASS

For further information, contact your local L·O·F Distributor or Dealer (listed under "Glass" in the Yellow Pages) or write to:

LIBBEY·OWENS·FORD GLASS COMPANY

608 Madison Avenue • Toledo 3, Ohio

BIG news!

APPLIANCE-SMOOTH! Smooth, hard, and glossy as your automatic washer is the surface of Truscon Steel Windows with exclusive new Supercoat Process. This finish actually was developed for appliances.

INSTALL WITHOUT PAINTING! Steel windows finished with Truscon Supercoat Process need no painting when installed. Maintenance painting won't be needed for many years. Exhaustive tests prove it.

TRUSCON

SUPERCOAT PROCESS

Install windows without painting! Stave off maintenance painting!

Now, you can get the solid strength of steel and avoid painting, too.

Truscon is introducing a great new super finish for steel windows. It is a two-coat baked enamel that originally was developed for water-using appliances in which corrosion must be avoided. And, superbly smooth, hard finish has been improved by the research laboratories of Republic Steel to further withstand exterior exposure.

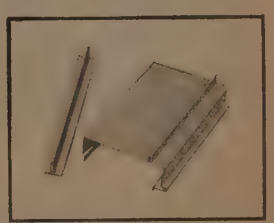
Smooth, hard, and glossy, Truscon's new Supercoat Process gives you a steel window that's ready for immediate installation. It's a rough, durable window finish that will stave off maintenance painting for many a year.

No need now to sacrifice strength and solidity in window sections simply to avoid painting costs.

Supercoat Process can be furnished *now* on specification in factory shipment on all Truscon Steel Windows for commercial, institutional and industrial construction. Standard color is a handsome light gray.

Send coupon

You'll want to see and examine this sensational new window finish as soon as possible. Send coupon for your free samples of Truscon window sections with new Supercoat Process.



REPUBLIC STEEL
TRUSCON STEEL DIVISION
Youngstown 1, Ohio

TRUSCON MARK OF MERIT PRODUCTS

REPUBLIC STEEL

NAMES YOU CAN BUILD ON

REPUBLIC STEEL CORPORATION
TRUSCON STEEL DIVISION
DEPT. C-5436
1128 ALBERT STREET • YOUNGSTOWN 1, OHIO

Yes, I'm interested in new Supercoat finish. Please send samples of hot rolled bar and strip steel window sections.

Name_____ Title_____

Firm_____

Address_____

City_____ Zone___ State_____

AIA FILE NO. 16-E

TRUSCON STEEL WINDOWS WITH NEW SUPERCOAT FINISH

7 TOUGH TESTS PROVE SUPERCOAT PERFORMANCE

1. SOAK TEST simulates field condition of windows standing overnight in a pool of water before installation.
2. SALT SPRAY TEST parallels coastal area atmospheric conditions.
3. WEATHEROMETER TEST duplicates the field condition of exposure to strong sunlight.
4. ABRASION TEST simulates abrasive materials rubbing against frames during installation, and abrasives windblown after installation.
5. HUMIDITY TEST parallels field conditions of humidity inside and outside.
6. ALKALI TEST duplicates field conditions of washing windows with ammonia, rain dripping off mortar, plaster, etc.
7. MAR PROOFNESS TEST simulates field condition of sliding frames across one another in handling.

SUPERCOAT PASSED THEM ALL!

5.

1. 2.

3. 4.

6. 7.

MORE TRUSCON PRODUCTS FOR MODERN BUILDING

Vision-Vent® Window Walls, Stainless Steel Windows and Curtain Walls, "O-T"® and Clerespan® Steel Joists, Ferrobord® Steel Roofdeck, Concrete Reinforcing Bars and Welded Wire Fabric. Republic's Berger Division offers Republic Steel Kitchens, Steel Lockers and Wardrobes, and a complete line of Roof Drainage Products in galvanized steel, stainless steel and terne. Republic's Steel and Tubes Division manufactures ELECTRUNITE® E.M.T. and Republic Heavy Wall electrical conduit, as well as square and rectangular ELECTRUNITE Welded Steel Tubing for architectural applications. Through its manufacturing divisions, Republic is big in building. Through its basic steel facilities, too, Republic is big in building. Republic mill products include Steel and Plastic Pipe, Sheets and Roofing, Bolts and Nuts for construction, Stainless Steel, Roofing Ternes, Nails.

REPUBLIC STEEL CORPORATION • TRUSCON STEEL DIVISION

1128 ALBERT STREET • YOUNGSTOWN 1, OHIO

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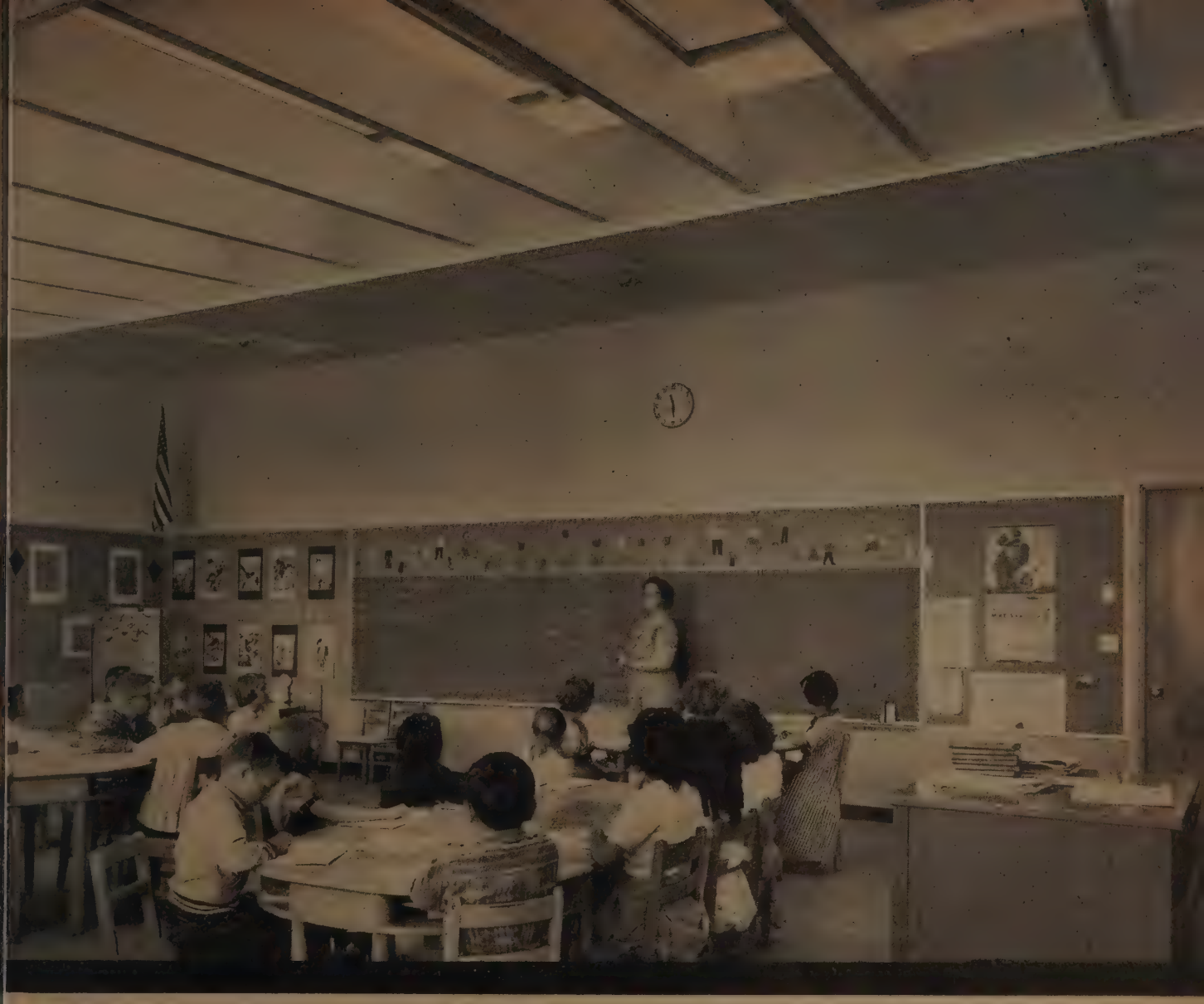

natural daylighting pays for itself

when you add the new Honeywell Light Saver* control system

Besides being both beautiful and functional, natural daylighting can save your clients up to 80% in electric light operation. This saving is obtained, however, only if artificial lights are turned off when they are not needed.

The new Honeywell Light Saver control system assures proper illumination without waste.

By automatically switching on or off selected lights, or by gradually dimming or brightening all lights simultaneously, it always maintains the correct number of foot-candles on study or work areas.

In doing so, the Light Saver not only conserves electric power, it also prevents eyestrain and promotes greater occupant efficiency.

For more specific information, call your local Honeywell office. At your request, a Honeywell specialist will help you plan a Light Saver control system to meet the lighting requirements of your building.

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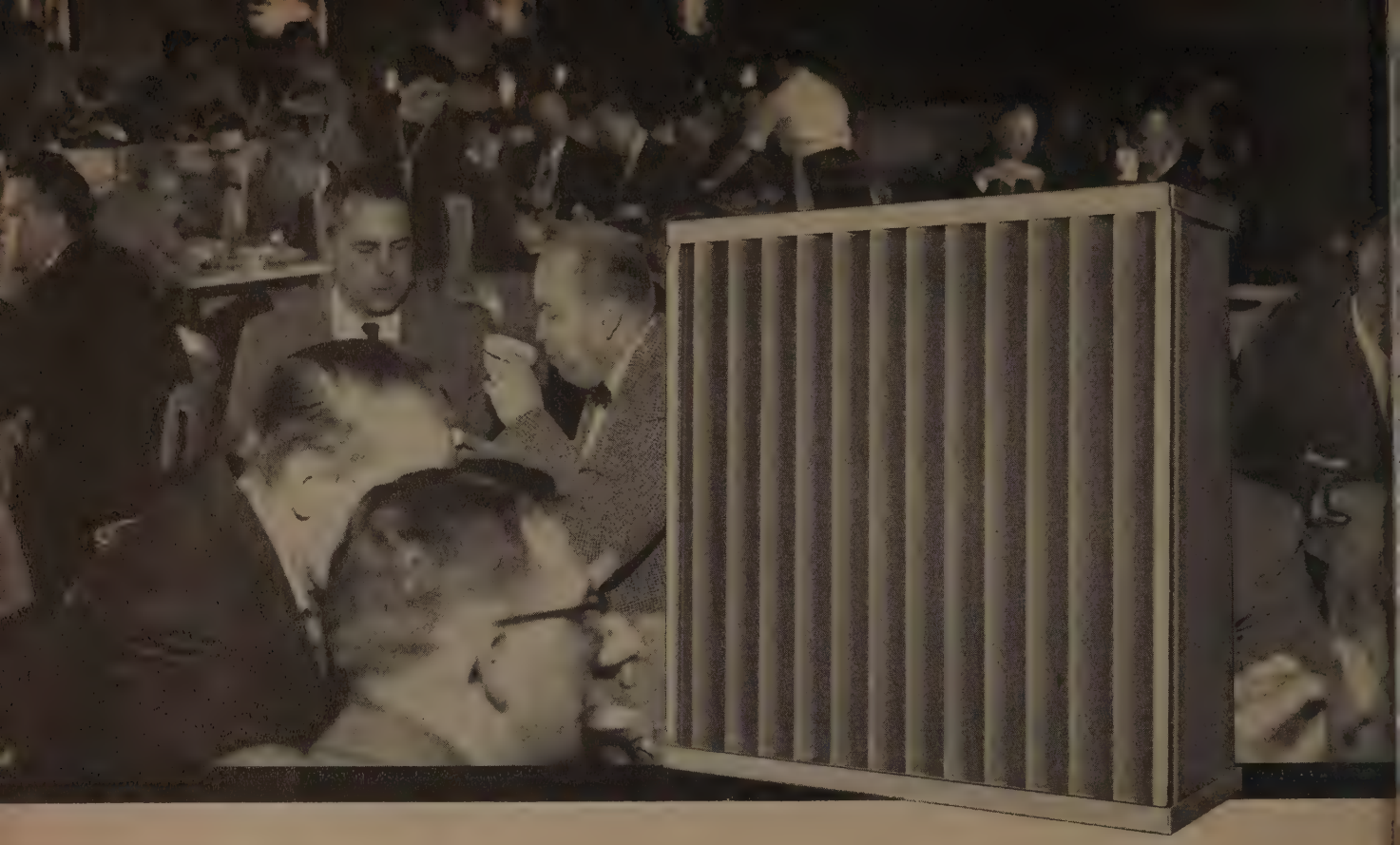
*Trademark



cut the cost of air conditioning with the NEW Honeywell Renew-Air Filter

Wherever people work or play, odor is a problem.

Traditionally, ventilation has been used to solve this problem. This dilutes the odor with fresh outside air. But outside air is so expensive to heat and cool, it is seldom economical to eliminate odor entirely.

Now, the Honeywell Renew-Air Filter makes positive odor removal practical.

By filtering return air with activated charcoal—the best odor-removing agent known to science—the amount of ventilating air needed is reduced. The air conditioning load drops. You can use smaller boilers and cooling equipment with *lower initial expense* and *lower operating costs.*

And for the ultimate in odor-free, dirt-free air, you'll want to combine the new Renew-Air Filter with the Honeywell Electronic Air Cleaner. The Electronic Air Cleaner cleans the air to any desired efficiency.

To obtain more specific information about both the Renew-Air Filter and the Electronic Air Cleaner, call your local Honeywell office or return the business reply card at the back of this bulletin.

Honeywell

H HONEYWELL *First in Controls*

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SMITHWOOD HALL INDIANA UNIVERSITY EGGERS & HIGGINS, SUPERVISING ARCHITECTS, NEW YORK N. Y.
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INDIANA LIMESTONE

Beautiful -- and a wise choice in building for more than a century

Now — the new mass produced random ashlar distinguishes all forms of modern or traditional architecture — yet the cost is within your building budget.

Used alone, or in combination with other materials, the new Indiana Limestone Veneer is the ultimate expression of character and beauty for all commercial, institutional, industrial and residential construction.

ilco

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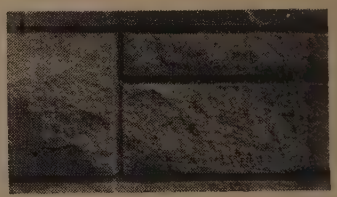
BEDFORD, INDIANA

World's Largest Producers of Building Stone

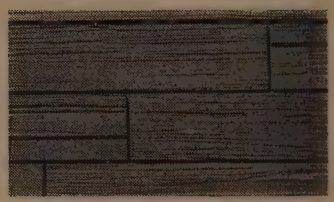
Create Beauty . . . Establish Value

WITH ilco LIMESTONE VENEER

The intrinsic value of a home is typified at its best when constructed of ilco Limestone Veneer. Here, the enduring quality remains — timeless as nature, a distinction all its own with lasting beauty. Almost impervious to the ravages of weather, ilco Limestone costs no more than that of any good masonry material. ilco Limestone Veneer will actually save money over the years because it requires no painting, no repairing and no replacement.



SPLITSTONE FINISH Preserves the natural appearance. Creates maximum play of light and shadow.



SHOT-SAWN FINISH Emphasizes long horizontal architectural lines. Popular for ranch style designs.

SAND-SAWN FINISH Smoothest, most uniform finish available. Tends to appear lightest of all finishes.

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BEDFORD, INDIANA
World's Largest Producer of Building Stone
Offices in Principal Cities

see our catalog in SWEET'S ARCHITECTURAL FILE or write for copy

Will The School You Are Planning *Ever* Need AIR CONDITIONING?

...the answer is YES!

Here's a partial list of schools which are air conditioned now, or are ready for it anytime —with Herman Nelson unit ventilators

Pleasant Hill School
Austin, Texas

St. Paul Evangelical Lutheran Church
Dolton, Illinois

Davy Crockett School
Phoenix, Arizona

Wilmot School
Wilmot, Wisconsin

Niles Township High School
Skokie, Illinois

South High School
Bakersfield, California

Morrilton Elementary School
Morrilton, Arkansas

Sierra Joint Union High School
Auberry, California

St. Paul's Lutheran Church
Clyde, Ohio

Catholic Student Center
Louisiana State University
Baton Rouge, Louisiana

Immaculate Heart of Mary Parish
Chicago, Illinois

New Science Building
Northeastern State College
Tahlequah, Oklahoma

South Union Junior High School
Fresno, California

Mockingbird Road Elementary School
Vero Beach, Florida

Administration & Educational Building
Buena Vista College
Storm Lake, Iowa

St. Monica Parish Church
Willows, California

Purdue University
W. Lafayette, Indiana

Wm. S. Speed Building
University of Louisville
Louisville, Kentucky

Elementary School
Phoenix, Arizona

Lodi High School
Lodi, California

McKinley School
Bakersfield, California

St. John the Baptist School
Chico, California

St. Monica's Church & School
Dallas, Texas

Southeastern College
Hammond, Louisiana

Trinity Episcopal Church
Lawrence, Kansas

Our Lady of Fatima Shrine
South Bend, Indiana

Sardis Presbyterian Church
Charlotte, North Carolina

St. Peter & Paul Parish
Turkey Creek, Indiana

Belle Isle Elementary School
Oklahoma City, Oklahoma

Eunice Smith School
Alton, Illinois

Holy Name Elementary School
Cook, Indiana

University of Pennsylvania
Philadelphia, Pennsylvania

Swarthmore College
Swarthmore, Pennsylvania

Immaculate Heart of Mary Parish
New Orleans, Louisiana

St. Mary's Church
Ft. Worth, Texas

St. Patrick's Church
Denison, Texas

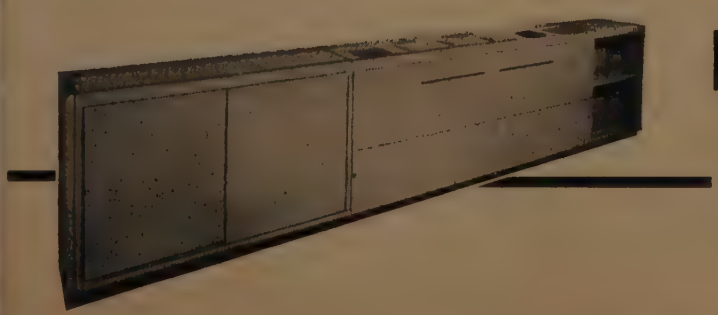
Already, more than 100 schools have planned for it—by installing HerNel-Cool II

Nearly every school would benefit from air conditioning as have offices, theaters, hospitals and homes. In fact, many new schools *are* air conditioned, or have prepared for it—by installing HerNel-Cool II unit ventilators. *This Herman Nelson product is the first unit ventilator to offer optional air conditioning,* as well as heating, ventilating and natural cooling (with outside air).

Already—less than a year after its introduction—it has been selected for use in more than 100 schools throughout the country. And no wonder!

These units can be installed now so that the school enjoys all the usual benefits of the famous Herman Nelson DRAFT|STOP system. Only the addition of a chiller in the boiler room is needed for complete hot weather air conditioning. This can be provided initially, or if it's not in the current school budget—at any future time.

Would you like more information? Just write to Herman Nelson Unit Ventilator Products, American Air Filter Company, Inc., Louisville 8, Kentucky.



AAF

herman nelson

UNIT VENTILATOR PRODUCTS

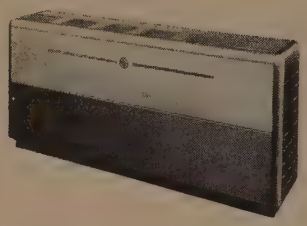
System of Classroom Cooling, Heating and Ventilating

Any Fuel . . . Any Climate . . .

HERMAN NELSON UNIT VENTILATORS GIVE MORE CLASSROOM COMFORT PER DOLLAR

HOT WATER OR STEAM

Herman Nelson Unit Ventilators with patented DRAFT|STOP control downdrafts without adding to the heat load, provide ideal classroom climates.

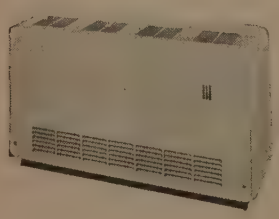


AIR CONDITIONING

The HerNel-Cool unit provides mechanical cooling, heating, ventilating or natural cooling as required. Thoroughly tested in hot, humid climates.

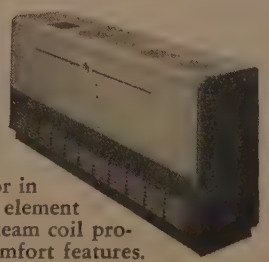
GAS

New UNIvent Gas School Ventilator provides all the health and comfort features of the DRAFT|STOP system in a completely self-contained unit.



MILD CLIMATES

AMERVENT built especially for schools in mild climate areas, provides fresh air cooling, heating and ventilating within the nominal cost of heating alone.



ELECTRIC

New Electric Unit Ventilator in which an electric heating element replaces the hot water or steam coil provides all DRAFT|STOP comfort features.

Herman Nelson now offers a line from which you can select the ideal unit for meeting any school's requirements! The cooling, heating, ventilating system can be "tailored" to provide true classroom comfort in the most economical and most practical way.

VARIETY OF FUELS

In temperate or cold climates, the *Herman Nelson Unit Ventilator* operates with either *hot water, steam, gas* or *electricity*. The patented DRAFT|STOP system has given a new meaning to "classroom comfort" as it controls down drafts and automatically provides a constant supply of properly heated or cool fresh air.

AIR CONDITIONING

HerNel-Cool units offer an economical and practical solution to the increasingly important air conditioning problem. Most of the year they provide heat, ventilation or natural cooling (with outside air). Air conditioning can be provided at any time by simply adding a chiller to the system. The units switch automatically to mechanical cooling with chilled water circulating in the same piping that carries hot water during cold weather.

MILD CLIMATES

Schools in mild climates have an increased cooling and ventilating problem and a decreased heating problem. With Herman Nelson *AMERVENT* these schools can now enjoy all the essentials for classroom comfort—cooling, heating and ventilating—without paying for the excess heating capacity required in frigid climates.

* * *

Flexibility will always be important to Herman Nelson—for there is no "one best" system to provide for heating, ventilating and cooling classrooms. The health and comfort of pupils and teachers come first. Climate area, design and structure of each school will indicate the most economical and practical system to achieve that ideal classroom atmosphere.

Would you like more information? Ask your Herman Nelson representative or write to Herman Nelson Products, American Air Filter Company, Inc., Louisville 8, Kentucky.

BETTER AIR IS OUR BUSINESS

AAF herman nelson

UNIT VENTILATOR PRODUCTS

American Air Filter Company, Inc.
System of Classroom Cooling, Heating and Ventilating

Photo: David W. Evans & Assoc.

Coarse-textured Mo-Sai spandrels on new Family Life Building at Brigham Young University, Provo, Utah. **Architect: Fred L. Markham.**

Texture And Tone

Characterize Newest Mo-Sai Look

Mo-Sai—a refined type of thin, reinforced architectural concrete—is one of today's most versatile building materials. Unique feature of Mo-Sai is the exposed aggregate surface, which can be varied from light to deep relief. The aggregate is usually a crushed and graded quartz or granite, or vitreous particles, though interesting new aggregates are constantly being added. The name "Mo-Sai" comes from the mosaic character of the finished precast surface.

Fine-textured Mo-Sai surfaces have long been popular, but many architects have developed beautifully imaginative applications with many of the new coarse textures. Texture versatility is one of the principal advantages of designing in Mo-Sai. Textures can be infinitely varied from satin-smooth to very coarse by using aggregates of different gradings . . . yet the fundamental flatness of the Mo-Sai wall surface is not affected. A special process, developed by Mo-Sai Associates, controls relief of texture, and exposes the aggregate to its full beauty. Quartz aggregate, for example, literally sparkles as the sunlight strikes the facets of the exposed quartz. Two or more contrasting textures are often used on the same job.

Color, too, can be "custom-tailored" to job requirements. Aggregate colors can be widely varied. Also, an extensive "palette" of mineral and synthetic pigments can be used to color the white cement matrix to blend or contrast with the selected aggregate. More than 2,000 different Mo-Sai colors have been produced—and new ones are constantly being added.

The design versatility of today's Mo-Sai is not confined to variations in color and texture. Few materials on the market today offer the design freedom of Mo-Sai. While average panels range from about 20 to 40 square feet in size, panels up to 100 square feet and more are not unusual. The large size permits fewer joints.

Mo-Sai shapes can be produced to suit almost any architectural concept. In addition to flat panels, Mo-Sai can be cast in fluted effects, bas reliefs, one-piece corners, lintels, grilles, architraves, and many other decorative and structural units. These special shapes match in color and texture the flat precast facing panels.

Lettering or decorative effects, raised or inlaid, can be cast in vivid vitric colors right in the Mo-Sai.

Another recent development in Mo-Sai use is the increasingly popular trend toward curtain wall design. Mo-Sai provides an ideal medium for curtain-wall de-

Continued on page 70

Beautiful floors like this are now possible with the new Crystalline Glazes. Used here are Tile Gems in 310 Cr. Blue, 335 Cr. Aqua, 340 Cr. Ivy and 345 Cr. Cobalt. Color Scheme 302. Color Plate 79. Joseph K. Seidle, Jr., Architect.

Be it in a private home or a commercial building, the lustrous new American-Olean Crystalline Glazes add a pleasing element of richness to tile installations. With this subtly-textured, yet rugged new glaze, it is now possible, for the first time, to use the same glazed colors on floors, as well as on walls and counter tops.

AMERICAN-OLEAN TILE COMPANY, EXECUTIVE OFFICES: 1000 CANNON AVENUE, LANSDALE, PA

LANSDALE, PA. • OLEAN, N. Y. • MEMBER: TILE COUNCIL OF AMERICA • PRODUCERS' COUNCIL

Scored Tile adds an attractive pattern to the large surface areas in this cafeteria of the American Telephone and Telegraph Company, Long Lines Department. Walls are in 340 Cr. Ivy in 4¼" squares and SD-3 Scored Tiles. Color Plate 372. Port Morris Tile & Terrazzo Co., tile contractor.

The new American-Olean Scored Tiles* give you an opportunity to create many handsome new designs with ceramic tile. Dozens of patterns are possible, and with 63 colors to work with (in Crystalline, Bright or Matte Glazes), the decorative combinations are unlimited.

Scored Tiles are made only by American-Olean. Write for our Booklet 1000 which gives full information and shows many of the patterns.

*PAT. APPLIED FOR

CERAMIC TILE

American Olean

AN-OLEAN TILE CO., INC. EXECUTIVE OFFICES: 1000 CANNON AVE., LANSDALE, PA. FACTORIES: LANSDALE, PA., OLEAN, N. Y. MEMBER: TILE COUNCIL OF AMERICA, PRODUCERS' COUNCIL

Now ZONOLITE® Perfects

LOWEST COST

Bonds Directly to

- ★ **Provides 3- and 4-hour Fire Ratings**
- ★ **Saves Days on Construction Schedules**
- ★ **Eliminates 7 inches of Height per Story**
- ★ **Gives Built-in Acoustical Benefits**

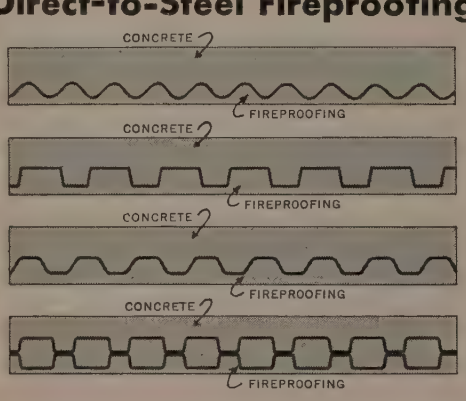
Now, with Zonolite direct-to-steel fireproofing, yo can cut over-all costs of materials and constru tion. On one building, for example, a savings \$30,175 was effected simply by using this new tec nique in lieu of another fireproofing metho Zonolite direct-to-steel fireproofing "has ever thing"—it speeds work progress, provides thre and four-hour fire ratings—provides addition bonuses other fireproofings do not offer.

Zonolite direct-to-steel fireproofing amazingly stic to the underside of steel floors, applies quickly hand or machine—reducing former constructi schedules by days. It provides its own attracti finish.

Sound-Conditions As You Fireproof!

This new direct-to-steel technique does more tha fireproof—*it sound conditions!* Zonolite fireproofi

Typical Steel Floor Systems Using ZONOLITE® Direct-to-Steel Fireproofing



OTHER WAYS TO ACHIEVE FASTER, LOWER-COST CONSTRUCTION WITH

In Bedford, N. H., School, insurance savings quickly pay for the Zonolite Plaster Fireproofing and Zonolite Acoustical Plastic. Arch.: A. J. Majeski. Plast. Contr.: J. F. McGranahan.

3325 Wilshire Blvd., office building, Los Angeles, Calif., uses Zonolite Plaster Fireproofing and Zonolite Spandrel Back-up System throughout. Arch.: Victor Gruen. Plast. Contr.: Martin Bros.

Gulfgate Shopping City, Houston, Texas, has Zonolite Plaster Fireproofing throughout. Arch.: John Graham & Co. Plast. Contr.: Tobin & Rooney.

New Advanced Technique for FIREPROOFING

Underside of Steel Floors!

composed of vermiculite and suitable binders with ceptional noise-reducing characteristics. The archi- ct can often design so that further sound-condition- g is unnecessary.

educes Other Material Costs

ith Zonolite direct-to-steel fireproofing you cut 7 ches from the height of each floor—a gain of one ory in every 14 in multi-story construction, a saving other construction materials.

enant Changes, Mechanical Alterations sily Accomplished

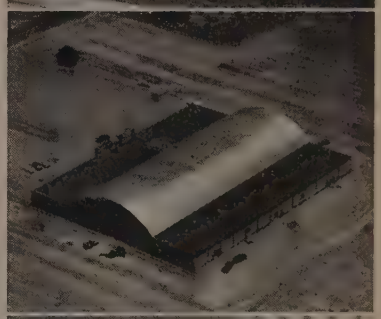
ecause the fireproofing is applied direct-to-steel—up gh, out of the way—there is free access to the me- anical installations. Tenant changes are accom- ished without cutting through the fireproofing in w or old buildings.

PREPARED to make the most of Zonolite direct-to- eel fireproofing. BE INFORMED on quick, sure, w cost fireproofing in all types of construction. Tear t the coupon now for FREE reference booklet giving tings, application data, all details.

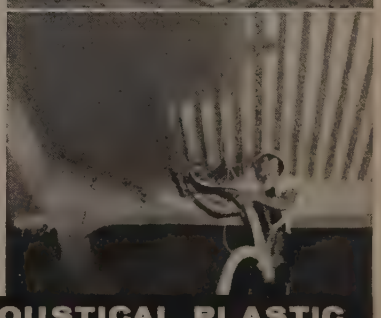
Typical ZONOLITE DIRECT-to-STEEL Fireproofing Installations

AAA Office, Kalamazoo, Mich. Fireproofed throughout with Zonolite applied directly to steel. Arch.: Louis Kingscott & Associates. Plast. Contr.: Ben Schuemann.

Zonolite Fireproofing was applied to underside of steel by machine in new-type steel roof at Phoenix, Ariz., Coliseum. Plast. Contr.: Gray Plastering Co.



Fireproofing direct to underside of steel floors in Bell Telephone Building, Pittsburgh. Arch.: Press & William C. Dowler and Associates. Plast. Contr.: Easley and Rivers.



ZONOLITE PLASTER FIREPROOFING AND ZONOLITE ACOUSTICAL PLASTIC

New York International Airport, Idlewild, N. Y., world's argest, is made firesafe with Zonolite Plaster Fireproofng throughout. Arch.: Skidmore, Owings & Merrill. Plast. Contr.: Mario & DiBono.

ZONOLITE COMPANY, Dept. PC-83
135 S. LaSalle St., Chicago 3, Illinois

Send me booklet PA-41 "Plaster and Acoustical Systems", and Data Sheet, PA-35 on "Direct-to-Steel Fireproofing".

Name_____

Firm_____

Address_____

City_____ Zone_____ State_____

Mo-Sai (cont'd from page 65)

signs. Metal inserts cast in the Mo-Sai units permit rapid erection and positive anchorage to the steel or reinforced concrete framework. At the same time, the relatively thin (usually 2″ to 4″) and lightweight (25 lbs./sq. ft.) Mo-Sai units can be produced in any desired size or shape. Mo-Sai precast curtain wall panels are often designed with built-in insulation, which can be provided in several ways. Rigid insulation can be cast sandwich-style right in the slabs. An insulating lightweight concrete core can be used. Or lightweight concrete, cork, or other insulating materials can be included as a back-up.

Mo-Sai precast facing can be designed for a wide variety of construction methods. For example, Mo-Sai facing can be used as an exterior form for a poured-in-place concrete wall. The usual concrete form preparation is eliminated, and only the inside face of the wall has to be formed. The large Mo-Sai units erect fast, and when the backing is poured and the joints are water-proof-caulked, the wall is finished. Unlike poured-in-place concrete, the Mo-Sai units are made and cured under rigid plant controls, and the exposed surface is predetermined and pre-inspected.

Mo-Sai is frequently applied to a back-up wall of either concrete block or brick. Anchor loops embedded in the slabs make positive anchorage easy on either new or old construction.

There are several widely used methods of anchoring Mo-Sai to a previously poured concrete structure. The use of dovetail anchor holes (which are later grouted) and anchor rods make the Mo-Sai facing an integral part of the main wall.

Fast-erecting steel framework is one of today's most widely used building methods . . . and Mo-Sai makes the perfect wall unit for this type of construction, whether used as a complete wall unit or backed up with other materials. Mo-Sai panels bolt easily to steel for positive anchoring.

Photos: David W. Evans & Assoc.

Snow-white Mo-Sai panels, 3″ and 5″ thick, with rigid insulation cast sandwich-style right in the slab, were anchored with bolts to steel rails on the Kimberly-Clark offices in Neenah, Wisconsin. Tongue and groove sides were set in neoprene gaskets, then pointed with mastic. **Architects: Skidmore, Owings and Merrill.**

"Flying buttress" effect in Mo-Sai enhances the entrance to the May Company in North Hollywood, California. **Architects: A. C. Martin and Associates.**

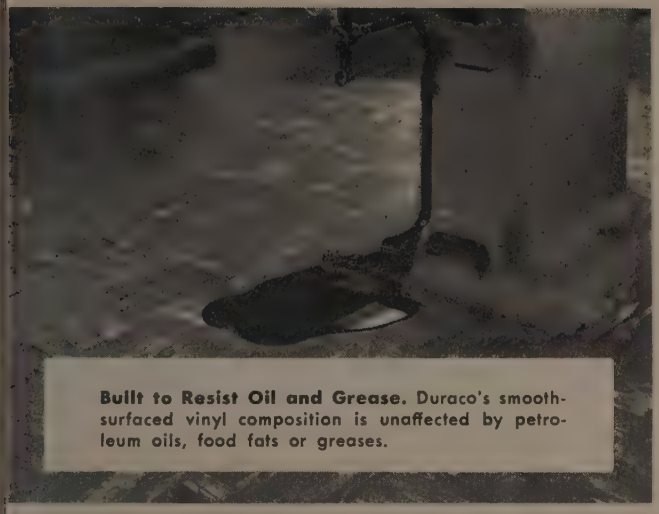
Handling and erection methods are modern and efficient

Mo-Sai units are easily handled with a wide variety of conventional equipment. Boom trucks and cranes are often used to hoist Mo-Sai units into anchoring position on relatively low structures. Lift trucks can be used to transport Mo-Sai units from on-the-job storage sites to equipment for hoisting to higher levels. Lift trucks can be used alone for some first or one-story installations.

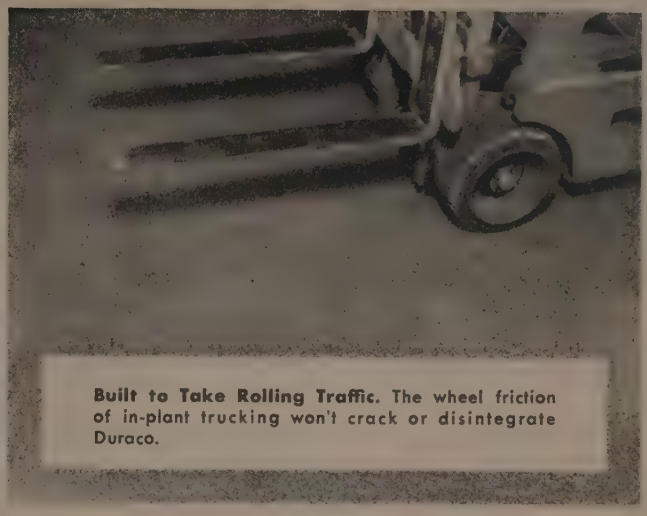
At higher elevations, an air hoist which lifts at elevator speed is often used. A monorail system, suspended on tripods on top of the building, aids the mason in receiving and setting the units. An alternative method for taller structures is the use of pulley-and-crane units positioned atop the building. Movable tractor rigs can also be used both for moving Mo-Sai and for erection.

With the wide variety of sizes and shapes, colors and textures, with a wide choice of design and construction methods, combined with speedy erection and positive anchorage, regardless of method, Mo-Sai is truly one of today's most flexible and favored building materials . . . used across the nation on outstanding new churches and schools, industrial and office buildings, hospitals, government buildings, stores and shopping centers.

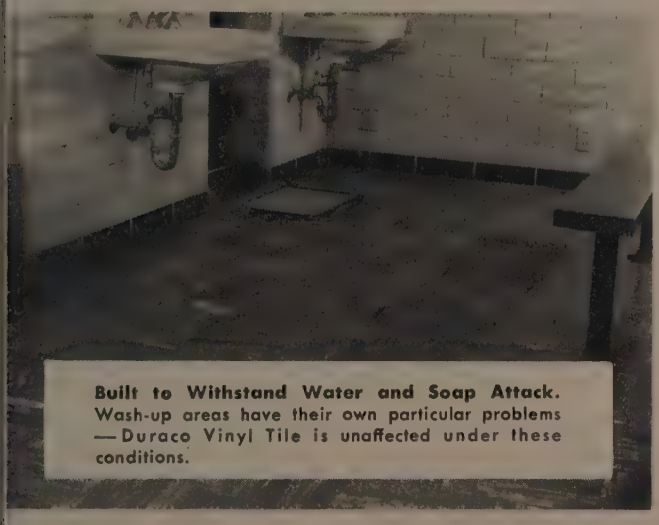
DURACO® VINYL INDUSTRIAL TILE



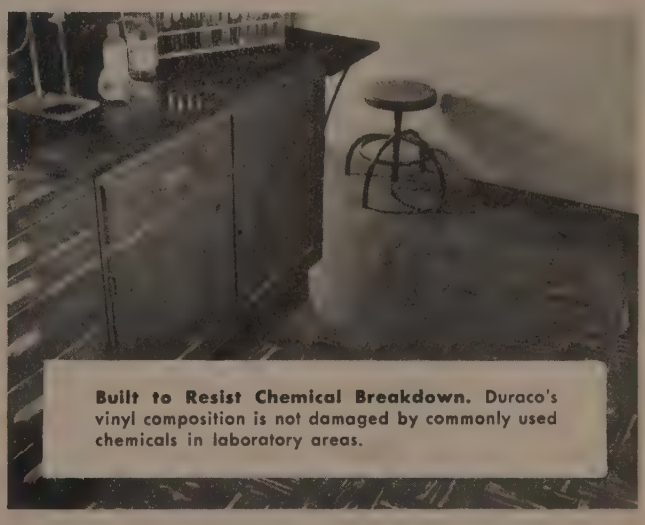
Built to Resist Oil and Grease. Duraco's smooth-surfaced vinyl composition is unaffected by petroleum oils, food fats or greases.



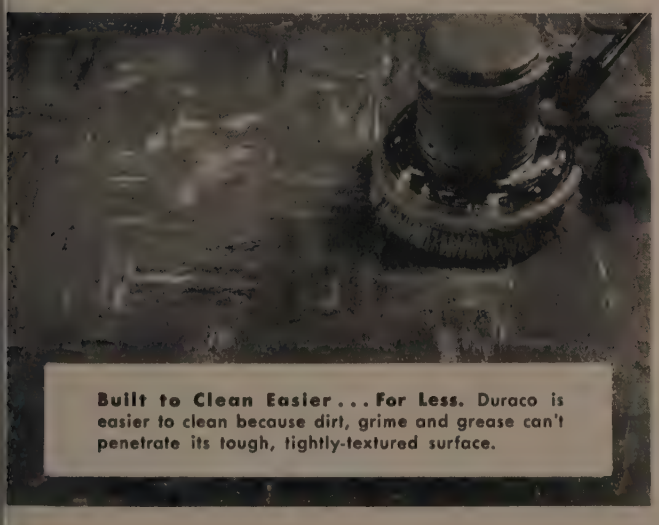
Built to Take Rolling Traffic. The wheel friction of in-plant trucking won't crack or disintegrate Duraco.



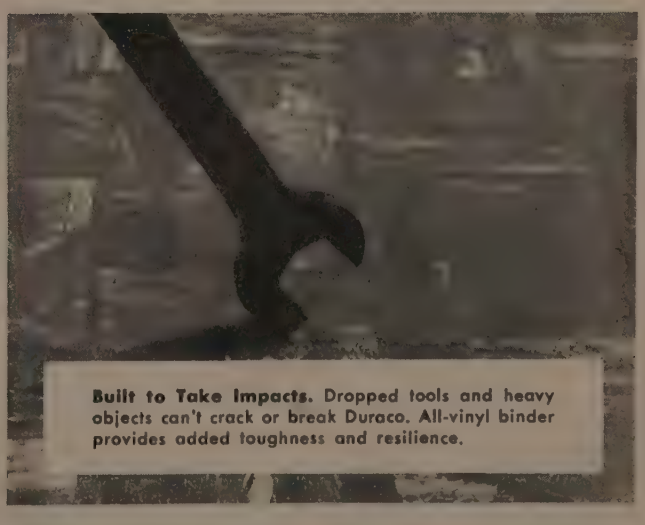
Built to Withstand Water and Soap Attack. Wash-up areas have their own particular problems — Duraco Vinyl Tile is unaffected under these conditions.



Built to Resist Chemical Breakdown. Duraco's vinyl composition is not damaged by commonly used chemicals in laboratory areas.



Built to Clean Easier . . . For Less. Duraco is easier to clean because dirt, grime and grease can't penetrate its tough, tightly-textured surface.



Built to Take Impacts. Dropped tools and heavy objects can't crack or break Duraco. All-vinyl binder provides added toughness and resilience.

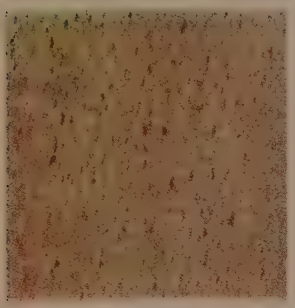
These Common Industrial Floor Problems are Solved Better with New Duraco

See next page for color chart and specifications

Azrock Floor Products Division • *Uvalde Rock Asphalt Company* • *San Antonio, Texas*

AIA FILE 23G

DURACO VINYL INDUSTRIAL TILE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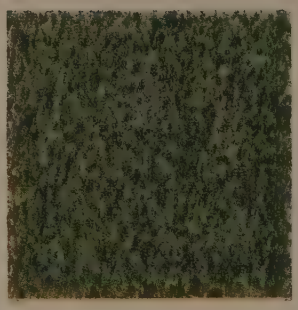
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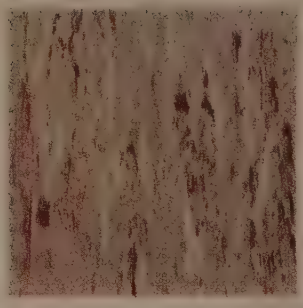
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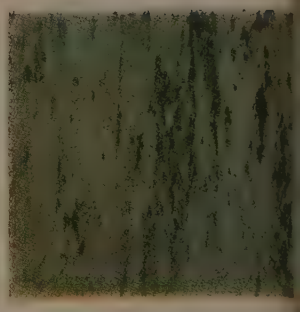
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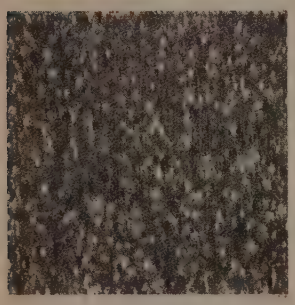
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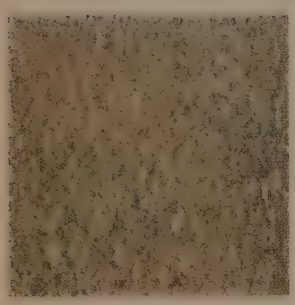
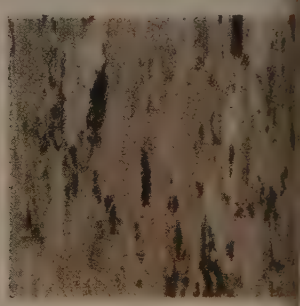
DV-439

DV-432

DV-438


DV-435

Duraco Vinyl Industrial Tile is available in 9″x9″ size and two thicknesses—standard 3/32″, heavy duty 1/8″.


DV-434

New Duraco Vinyl Industrial floor tile has been designed specifically to meet the problems peculiar to factory flooring areas. It is composed principally of asbestos fibre, inert filler and coloring pigment, now bound together with a 100% vinyl binder. This major new improvement gives Duraco rugged durability to take the common abuses to which most factory floor areas are subjected.

RESISTS OIL AND GREASE

Because of its 100% vinyl binder, new Duraco is unaffected by commonly used greases and oils such as lubricating oil, gasoline, kerosene, cup grease—prime causes for breakdown in ordinary industrial flooring.

RESISTS SHOCK AND IMPACT

The amazing ability of new Duraco to withstand the shock of dropped tools and heavy objects, and rolling friction from in-plant trucking is another benefit resulting from its 100% vinyl binder.

RESILIENT, SLIP-SAFE SURFACE

New Duraco has a cushioned resilience that reduces employee fatigue. Unwaxed, its surface has a sure-footed, slip-safe quality that is safer to walk and work on.

RESISTS FIRE

Due to its high asbestos content and other noncombustible ingredients, new Duraco is highly fire resistant, increasing the over-all safety factor in areas where it is used.

QUICK UNIT INSTALLATION

Installation of new Duraco is simple and quick because it is laid in conveniently sized 9″ x 9″ units. This product feature enables alterations and repairs to be made with minimum speed and minimum interruption to manufacturing operations.

FUNCTIONAL DECORATIVE CAPACITY

Duraco, with or without feature strips, can be installed in such a manner as to outline trucking aisles, specific storage areas, and to aid in identifying the general plant floor layout. In addition its bright new colors, in both marble and terrazzo patterns, contribute materially to employee morale.

EXCEPTIONAL FLEXURAL STRENGTH

Its 100% vinyl binder makes Duraco unusually flexible insuring quick and permanent conformation to the sub-floor after installation, without cracking or breaking.

LOW MAINTENANCE COST

The smoother, more tightly textured surface of new Duraco makes it the easiest, most economical industrial flooring to clean and keep clean. In addition the marble and terrazzo styling helps to conceal surface dirt.

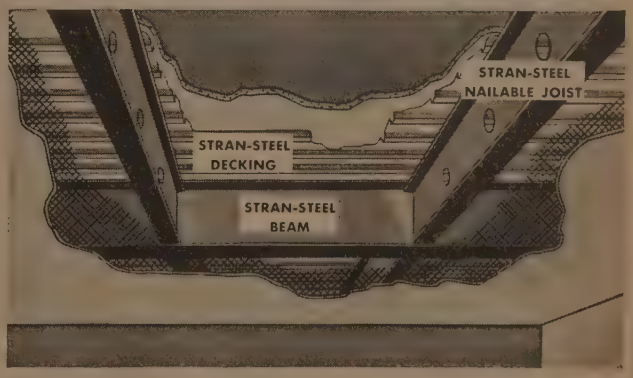
AZROCK PRODUCTS DIVISION • UVALDE ROCK ASPHALT CO.

HOW STRAN-STEEL FLOOR-CEILING SYSTEM SAVES 6 WAYS

Stran-Steel's Floor-Ceiling system integrates wide flange beams, nailable joists and roof decking into one money-saving combination.

1. Overall height reduction saves materials on each floor (usually one course of bricks or equivalent).
2. No need for costly dropped ceilings or unsightly boxed beams.
3. Stran-Steel joists fit flush into Stran-Steel beams for better lateral beam support.
4. Stran-Steel roof deck is nailed to Stran-Steel nailable joists. Welding is eliminated. Application costs are cut 25 percent.
5. Conventional ceiling is also nailed to underside of Stran-Steel joist; saves labor and materials.
6. Less bridging required; saves time and money.

Stran-Steel Building System includes a complete line of lightweight, space-saving structural components for institutional, retail and industrial construction. Consult your nearest Stran-Steel dealer listed in the Yellow Pages under *Steel* or mail the convenient coupon.



Stran-Steel's Basic Architectural Products

JOISTS and STUDS BEAMS ROOF DECK C—SECTIONS COLUMNS CHANNELS

Dept. 1-7

STRAN-STEEL CORPORATION

Detroit 29, Michigan • Division of

NATIONAL STEEL CORPORATION

For More Information, Use Postage-Free Postcard at Back of Book

Bruce S. Blietz, V. P. of Irvin A. Blietz (
ganization, nationally known builders, tal
5 minutes to find out how FIAT Shower Flo
make better showers possible at lower co

Learn the *money-saving method* for better shower construction

The cross section sample being shown in the photograph above clearly and simply demonstrates why the FIAT PreCast method of shower floor construction is the answer to an age old building design problem. It takes but a few minutes to see how this one-piece floor has many, many advantages over old fashioned, built-on-the-job shower floor construction. It is immediately evident that this solid, monolithic unit does away forever with any problems of leakage. The cut-away view shows how the integral flange forms a watertight seal between the floor and shower wall material (whether tile, plaster, wallboard or structural glass). You can examine how the drain is cast permanently into the floor material and how the inclined floor and raised shoulders deflect water downwards toward the drain. You will appreciate the substantial savings of on-the-job labor and understand why the low installed cost of a PreCast FIAT Floor makes all other shower floor methods obsolete.

See it Now!

It's so much easier to see the advantages than to read about them. That's why we would like just five minutes of your time to show you this cross section sample. You can save real money and do a better job at the same time. Clip coupon to your letterhead and get full information. No obligation of course.

FIAT METAL MANUFACTURING CO.
9331 Belmont Ave., Franklin Park, Ill.

☐ Please have representative contact me.
☐ Send further information on PRECAST SHOWER FLO

Name_____

Company_____

Address_____

City_____ State_____

Type of Business_____

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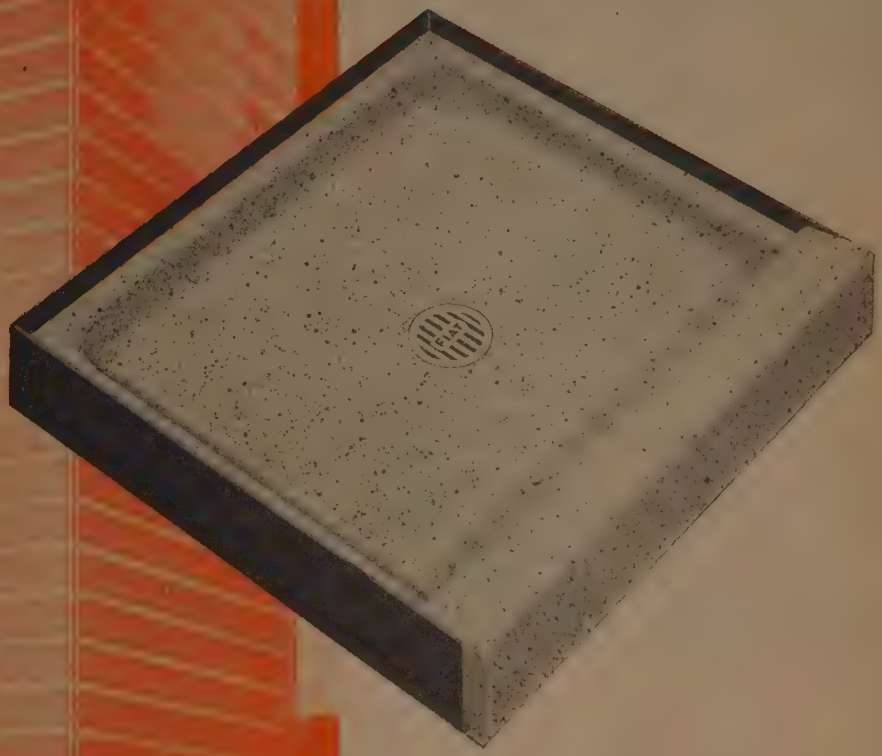
rchitect:
, Alschuler & Sincere
Herbert S. Greenwald
ontractor:
Plumbing & Heating Co.
Wholesaler: Amstan Supply
of American Radiator and
Sanitary Corp.

project to be known as 900 Esplanade and Commonwealth Promenade will have FIAT PreCast Shower Floors in every shower. Added proof that products by FIAT set the standards of shower quality.



THE Plus IN 1238 Plush APARTMENTS

FIAT® PreCast SHOWER FLOORS

Only the best is good enough on Chicago's fabulous "Gold Coast"

FIAT Shower Floors permanently answer the problem of shower floor leakage and high costs. Less product cost, less labor cost and less maintenance costs are the benefits of FIAT'S one-piece unit cast in a solid, monolithic slab with genuine marble chips. The FIAT PreCast Shower Floor is simply placed into position and lead caulked to the drain outlet. Once this simple, fast, inexpensive job is completed, the shower wall may then be built of any type material desired; plastic or ceramic tile, marble, plaster or structural glass.

Send for specifications on the complete range of styles and sizes.

FIAT METAL MANUFACTURING CO.
9331 W. Belmont Ave. • Franklin Park, Illinois
Since 1922...First in Showers / *Packaged Showers • Doors • Floors Toilet Room Partitions*
OTHER COMPLETE PLANTS: Long Island City 1, N. Y.; Los Angeles 63, Calif.; Orillia, Ontario, Canada

NEW space-saving expansible Frank Adam products

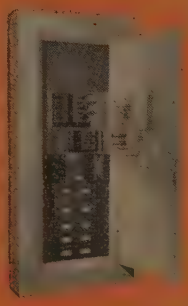
Include these (FA) products for distribution of light and power in your future residential or industrial building plans—wherever space and future power requirements are factors.

Designed to fit into a minimum of space, these safe, dependable long-lasting and trouble-free (FA) products have the added advantage of being easily expanded to take care of both present and future power demands.

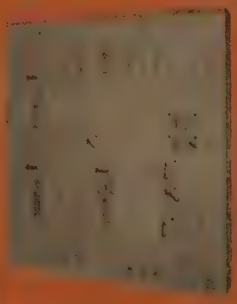
Ask your nearest (FA) representative about them. He is listed in Sweet's Architectural and other catalogs.

if it's FA *it's* OK

(FA) QP QUICKLAG P AND QS QUICKLAG S LIGHTING PANELBOARDS with thermal magnetic trip circuit breaker provide safe dependable protection against short circuits or overloads.



(FA) PLUG-IN FEEDER DISTRIBUTION PANELBOARDS feature the famed (FA) Pulfuzswitch, (FA) Klampswitchfuz and (FA) Shutlbrak horsepower-rated operating switches. Provides safe, efficient disconnect service.



(FA) FRONT CONNECTED SWITCHBOARDS for mounting against wall. Built of standard pre-assembled switching units that fit together. Switch units are either (FA) Shutlbrak or (FA) Klampswitchfuz plug-in design

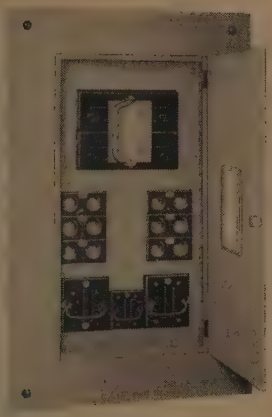
FRANK ADAM ELECTRIC CO.

MAIN P. O. BOX 357 • ST. LOUIS 3, MO.

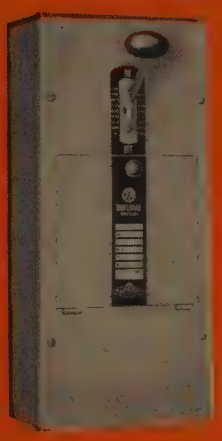
makers of

busduct • panelboards • switchboards • service equipment
safety switches • load centers • Quikheter

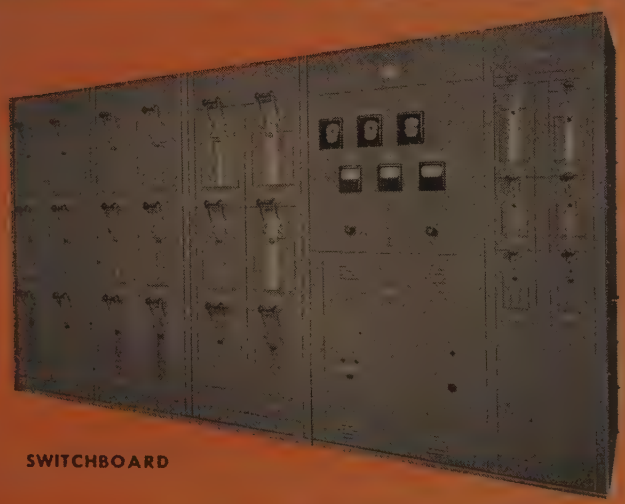
MIDGET POWER PLUGIN



PF-10 SERVICE EQUIPMENT



SHUTLBRAK SWITCH



SWITCHBOARD

safe,
dependable
circuit protection
for home
or business

That's what the trade-mark FA symbolizes—equipment that is not only the finest in safety and efficiency, but will give long-lasting and trouble-free service.

So insist on FA for the control and distribution of power and light.

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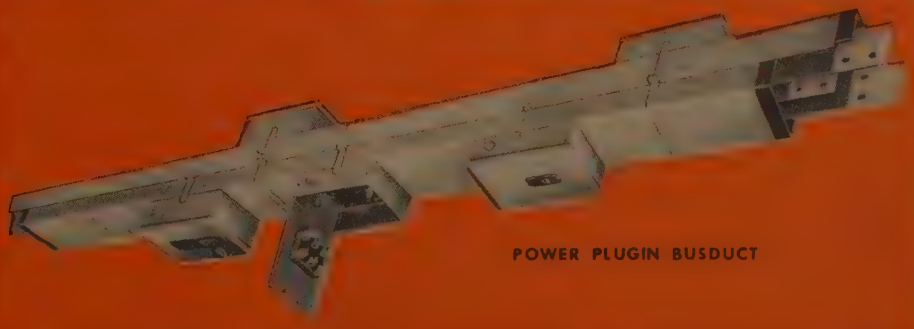


POWER PLUGIN BUSDUCT

perlite (cont'd from page 26)

maximum spans between joists could be increased to 48 inches and qualify for a 50 pound design load with a safety factor of 6. Previously 36 inch spans were considered maximum for this type of deck.

Fire Resistance

One of the primary advantages of perlite concrete roof decks is that they not only provide incombustible insulation but act as a fireproof masonry barrier between the interior of the building and combustible bituminous roofing materials.

Taking advantage of this fact, a test conducted by Underwriters' Laboratories has now shown that perlite insulating concrete reinforced with 48-1214 wire mesh and placed over galvanized, corrugated steel decking qualifies for a full one-hour fire rating even when the steel decking is exposed directly to flames. Thus, in buildings where a one-hour fire rating is required it is possible to eliminate fireproofing of the deck itself and confine the fireproofing to supporting beams and columns which can be surrounded with a ¾-inch thick membrane of perlite gypsum plaster on metal lath.

Reinforced Mesh

Like all portland cement concrete, perlite concrete normally requires the use of reinforcing mesh to act as temperature steel and to control shrinkage. However, where only nominal thicknesses of perlite insulating concrete are used, it is now practical to eliminate reinforcing mesh in insulating concrete placed over galvanized, corrugated steel decks.

Research conducted by Granco Steel Products Corporation shows that the physical and chemical bond between perlite concrete and galvanized steel decking is stronger than the concrete itself, so that the adhesion between the concrete and corrugated steel decking eliminates the need for reinforcing mesh in many cases.

However, reinforcing mesh is required in perlite concrete slabs where a fire rating is necessary, since the mesh helps to hold the perlite concrete in place in the event that the supporting form is weakened by fire.

Venting Construction Moisture

Like all masonry, perlite concrete contains moisture which must be dried out after installation. However, the drying out period of perlite concrete roof decks is often limited by the desirability of applying built-up roofing as soon as possible to protect the building from rain. Normally, roofing is applied five to seven days after placing of the perlite concrete.

When perlite concrete is installed over vented metal decks, formboards, metal lath or paper backed wire mesh, the concrete can dry out by venting moisture downward. This venting is hastened by vapor pressures developed as a result of solar heating. Obviously, when perlite concrete is placed over more impervious materials such as structural concrete or unvented metal decks, downward venting is restricted and the concrete should be as dry as possible before application of roofing.

Recent tests indicate that even when perlite concrete is placed over vapor barriers, adequate venting can be obtained by providing ½-inch wide vent channels across every 40 to 50 lineal feet of concrete, and by installing perimeter roof flashing in such a way that vapor pressures can be dissipated.

These vent channels may be cast in the deck by inserting a ½-inch board at the time of placing the concrete, or the concrete may be installed monolithically and the vent channels cut in later with a conventional masonry saw. In either case, the channels must extend completely across the deck and intersect with the 1-inch air space or thermal expansion joint normally placed around the perimeter of roof deck slabs. The perimeter air space thus serves as a channel for transmitting vapor pressure through specially designed flashing.

As a result of tests already completed, it is evident that with this new venting system, perlite concrete can be instrumental in simplifying the re-roofing of old buildings. Where the old roof decks are structurally adequate, perlite insulating concrete can be placed directly over existing built-up roofing without removing the gravel. Vent channels are then provided in the perlite concrete and the new built-up roof applied. Thus the cost of removing old roofing is eliminated and the new perlite concrete adds insulation as well as the ideal base for a new built-up roof.

terrazzo (cont'd from page 11)

Terrazzo Mixture: The terrazzo mixture should be composed of 2 to 2½ parts of marble chips to one part of portland cement. The color, kind and size of marble chips and either white or gray portland cement should be specified by the architect, owner or builder before the contract is signed. One part of marble chips should equal 100-pounds and one part of portland cement should equal one 94-pound sack.

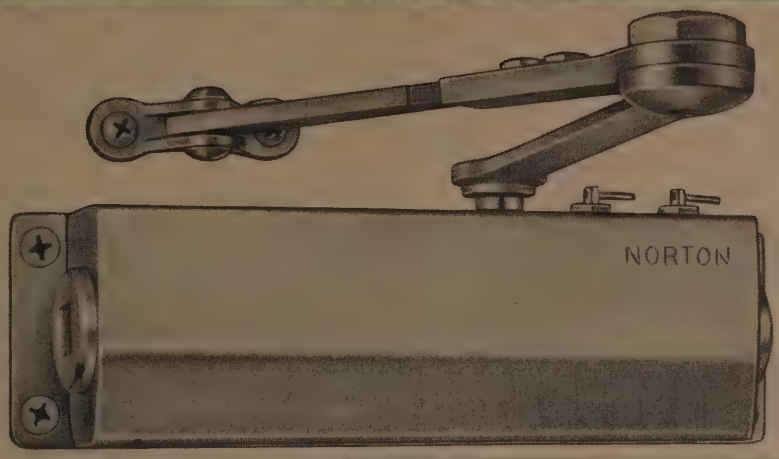
The mixture should be of uniform composition of the several kinds and colors of marble chips. The occasional practice of placing a uniform mixture of chips of one color and sprinkling several other colors of chips on the surface before rolling begins is not recommended by the National Terrazzo and Mosaic Association. If color is used in the mixture, it must be weighed and not measured.

Placing: The concrete slab should be clean and free of all other materials. Mortar, lime, or any other material left on the slab may cause a failure of the bonding action. The slab should be thoroughly saturated with water and the excess removed before any of the terrazzo mixture is poured. The concrete slab should then be slushed with pure cement immediately before pouring the terrazzo mixture.

Complete information on monolithic as well as conventional terrazzo is available from National Terrazzo and Mosaic Association, 711 - 14th St., N. W., Washington 5, D. C.

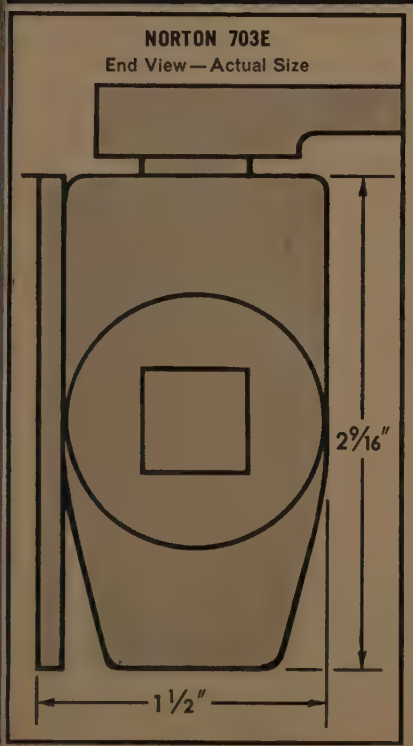
Announcing 2 More "Firsts" for

NORTON DOOR CLOSERS!



Norton 703E
Surface-mounted type... First door closer ever made with extruded aluminum alloy shell.

Norton 750
Revolutionary corner design with concealed arms and extruded aluminum alloy shell.



Ultra-Modern in clean-lined functional design...Traditional in ruggedness of construction...full rack and pinion dependability of operation.

After years of research to perfect suitable alloys and designs, Norton now offers the very first door closers which are not cast iron...not die cast or sand cast but *extruded from tough aluminum alloy* of such density that leakage through the shell is eliminated.

Utilizing this advance are two brand new Norton models specifically designed to complement the structural simplicity of modern doors...engineered to serve indefinitely with the efficiency, low maintenance and durability typical of all Norton Door Closers.

NORTON 703E: Surface mounted type, can be used on either side of door...only 1½" projection...can be finished to match hardware...up to 180° opening, trim permitting.

NORTON 750: Corner type of unique design for outside doors . . . arms completely concealed when door is closed... blends unobtrusively with latest aluminum frame doors.

But, not all advantages of these newest Norton Closers can be listed here. Write today for new data sheets just off the press giving full description and specifications.

NORTON® DOOR CLOSERS
Dept. PC-38 • Berrien Springs, Michigan

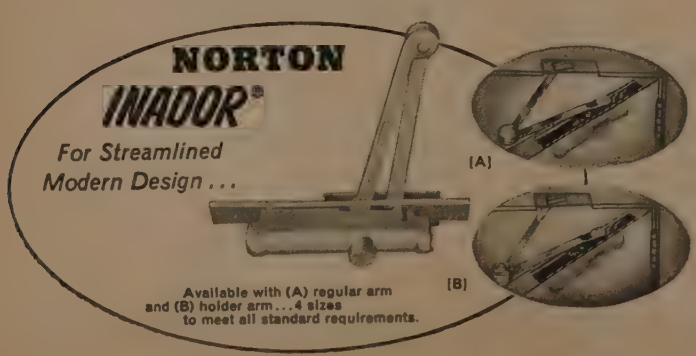
A continuing series of outstanding office buildings, churches, schools, hospitals and industrial structures using NORTON DOOR CLOSERS

THE LAST WORD IN SCHOOL DESIGN
THE ULTIMATE IN DOOR CLOSERS

Frederic Burk High School • San Francisco, California

The Frederic Burk High School is thoroughly modern in much more than external appearance. Every detail was planned to promote maximum functional efficiency with provision for adaptation to future changes in subjects and teaching methods.

Door closers are all surface mounted Nortons, modern counterparts of Norton Door Closers still in daily use after continuous service ranging up to 20 to 30 years and more in famous public buildings. For complete information about these and other Norton models, consult the current NORTON catalog. Write for a copy today if you don't already have one.



A complete line of Norton Surface-type Closers is available for installations where concealment is not essential.

NORTON®
DOOR CLOSERS
Dept. PC-38 • Berrien Springs, Michigan

Armstrong LINOTILE . . .

the flooring spec for the new Connecticut General Life Insurance Company Building, Bloomfield, Conn.

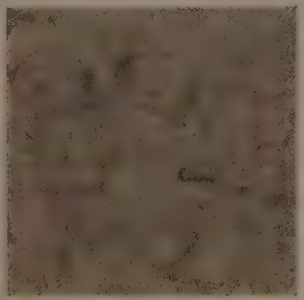
Architects: Skidmore, Owings and Merrill, N.Y.C.
Consultant on interiors: Florence Knoll
Knoll Associates, Inc., N.Y.C.
General contractors: Turner Construction Company, N.Y.C.

The new headquarters of the Connecticut General Life Insurance Company have been cited by the AIA as one of the "Ten Buildings in America's Future." Armstrong Linotile—a floor which has been tested in use for many years—was chosen for virtually all the important areas of this most modern building. Its subtle graining makes a perfect background for the modern architectural features. Linotile is regarded as one of the most durable of all resilient floors. In addition it has a reputation for low-cost maintenance.

- **Gauge: ⅛″ (Colors go all the way through the composition. No felt or burlap backing.)**
- **Withstands furniture loads up to 200 lbs. per square inch.**
- **Unusual resistance to abrasion and staining.**
- **Exceptional ease of maintenance.**

Now—a new textured series of 8 muted colors A new formula (T-58 by Armstrong Research Scientists) permits the manufacture of clearer, brighter colors in Linotile without sacrificing any of its qualities of durability and easy maintenance. Eight new colors added to the Linotile line are shown below.

Now—26 colors in three stylings Never before has there been such an opportunity to meet every decorative need with a resilient floor of Linotile's reputation. The wide variety of colors and style effects, together with a choice of 9″ x 9″, 12″ x 12″ and 18″ x 36″ sizes, makes Linotile a true custom flooring material.



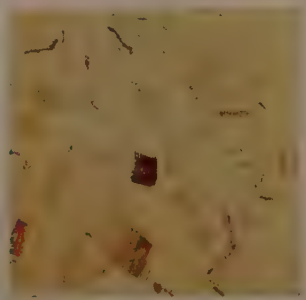
Fog Gray No. 150

Pink Beige No. 152

Mist Gray No. 154

Sunset Yellow No. 156

Iceberg Green No. 151



Ivory Dawn No. 153

Warm Taupe No. 155

Tanbark Brown No. 157

NEW! Armstrong CUSHION-EZE UNDERLAYMENT

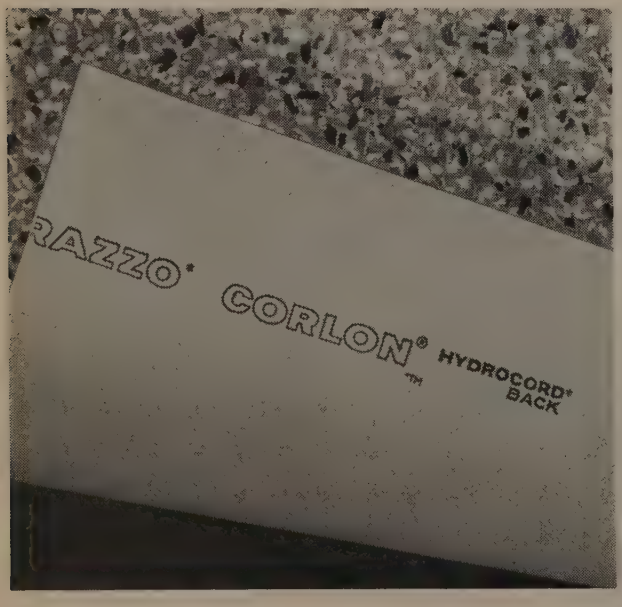
makes most resilient floors more comfortable, quieter underfoot; even easier to maintain

Cushion-Eze Underlayment is a thick, springy layer of foam bonded to felt. It gives resilient floors unusual comfort and quiet, as well as simplifying maintenance. You can specify Cushion-Eze Underlayment with linoleum, inlaid vinyl sheet Corlon, and Linotile. The results are nothing short of revolutionary.

The use of Cushion-Eze Underlayment adds relatively little to the cost of the resilient floor installation. In remodeling, it can save money because it permits the installation of many new resilient floors without the cost and mess of removing the old flooring.

NEW! Armstrong VINYL CORLON (Sheet Flooring)

for installation on grade and below-grade concrete subfloors



Exclusive Hydrocord Back resists alkaline moisture, permits specification of sheet plastic flooring on concrete in contact with the ground

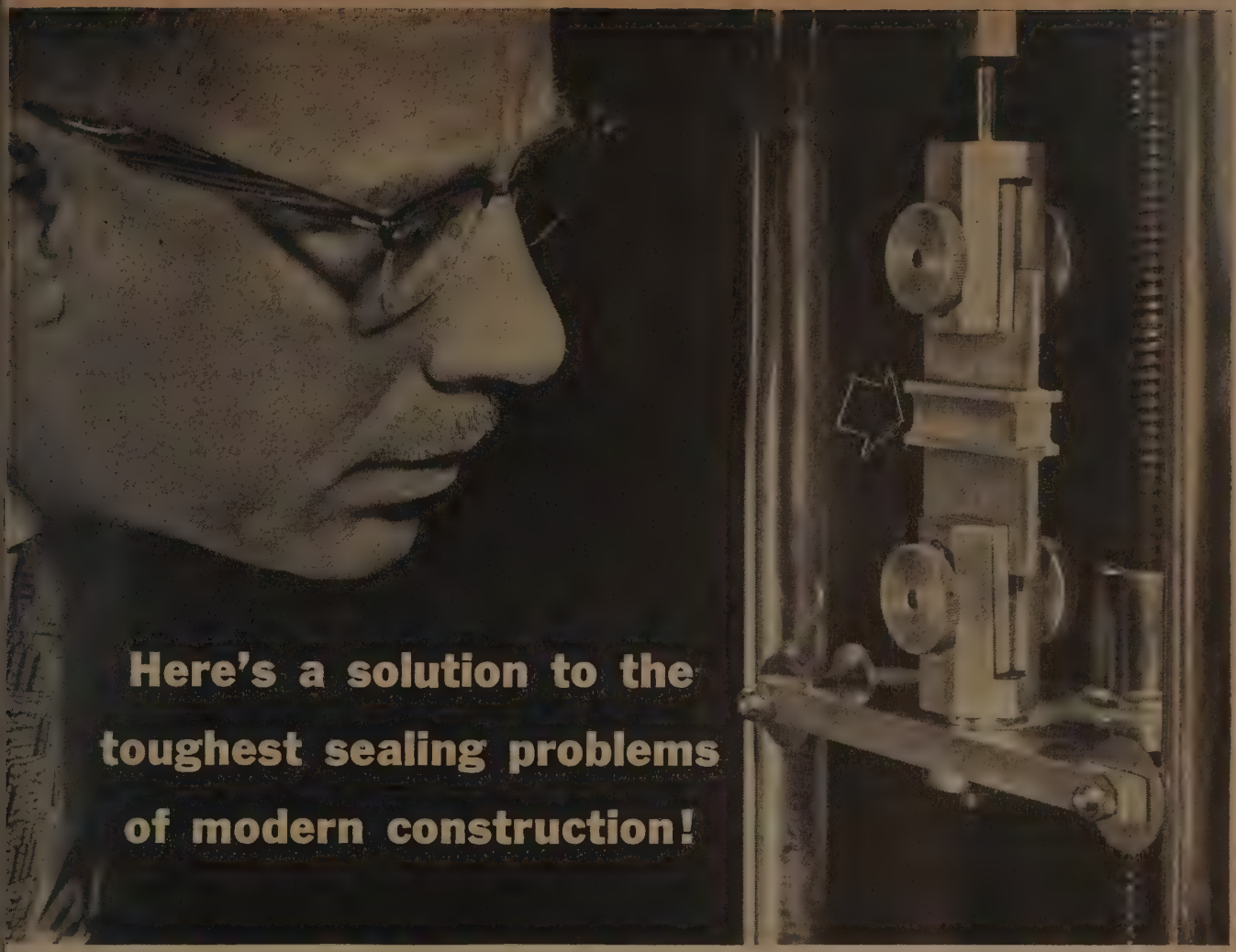
Now many of the stylings in Armstrong Sheet Plastic Corlon are available with Armstrong's exclusive new Hydrocord Back. This specially formulated backing is not harmed by alkaline moisture that is always present to some degree in concrete in direct contact with the ground. Thus, for the first time, you can specify sheet plastic flooring for virtually seamless floors in grade-level buildings and in basements. Armstrong Corlon with Hydrocord Back comes in rolls 6 feet wide, up to 90 feet in length; costs little more than sheet Corlon with Armofelt Back.

SEND FOR TECHNICAL INFORMATION AND SAMPLES. Use the postage-paid inquiry card at back of this Bulletin, or call the Architectural-Builder Consultant in your nearest Armstrong Floor Division Office, or write Armstrong Cork Company, Lancaster, Pa.

Armstrong RESILIENT FLOORS

LINOLEUM • INLAID VINYL CORLON • RUBBER TILE • CORK TILE • LINOTILE
CUSTOM CORLON PLASTIC TILE • EXCELON VINYL-ASBESTOS TILE • ASPHALT TILE

We acknowledge the assistance of The American Institute of Architects in editing the subject matter and form of presentation.



NEW DAP *FLEXISEAL*
POLYSULPHIDE POLYMER COMPOUNDS

DAP Flexiseal Compounds are rubber-like sealants with remarkable properties of adhesion, exceptional flexibility, and extremely long life. Their base material is Thiokol*. They can be mixed easily and applied quickly to practically all types of building materials.

Flexiseal Rubber-Based Compounds will maintain an absolute seal under severest conditions of exposure, temperature, expansion and contraction. They are ideal for caulking, glazing and sealing in the installation of curtain walls, modular panels of all types, large glass sections, and for filling expansion joints. You're sure of your seal with Flexiseal because adhesion is always greater than cohesion.

*Trademark of Thiokol Chemical Corporation

Send today for Technical Bulletins on DAP Flexiseal.

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PRODUCTS AND APPLICATIONS

PRODUCT / APPLICATION	Curtain Wall Panel Joint Sealing—Metal	Curtain Wall Panel Raw Edge Stripping	Curtain Wall Panel Sealing	Caulking joints and seams—wood, metal, masonry	Sealing joints in siding—asbestos, metal, etc.	Setting Insulating Glass	Chanel or Stop Glazing (Wood or Metal)	Glazing Steel Sash—Interior	Glazing Steel Sash—Exterior	Glazing Aluminum Sash	Glazing of Bronze or Galvanized Bonderized Steel Sash	Glazing Wood Sash—Primed	Glazing Wood Sash—Unprimed
DAP Rubber Based Compound	●	●	●	●	●	●	●						
DAP 1231 Mastic Glazing Compound			●			●	●						
DAP Twin-T-Mastic Tape				●		●	●						
DAP Twin-T-Mastic				●	●	●	●						
DAP Caulking Compound				●	●								
DAP Caulking Compound—Black Tite				●	●								
DAP 1012 Glazing Compound								●	●	●	●		
DAP Metal Glaze								●	●				
DAP Armglaze Type M												●	●
DAP Steel Sash Putty								●	●				
DAP Casement Putty								●	●				
DAP Pure Linseed Oil Putty												●	
DAP White Lead Putty												●	

READY INTEGRATION with varying building conditions can be expected with Hauserman SERIES CC WALLS. These beautiful walls can be rearranged with ease whenever desired; are economical to maintain as well as attractive in appearance.

for every space division need...

for every budget...you can now specify

MOVABLE *Hauserman* WALLS

HIGH STYLE in infinite combinations is possible with Hauserman HORIZON system. Variety of modular components and wall materials gives custom look.

TRIM AND EFFICIENT office units can be achieved economically with Hauserman DIVIDER-WALL. Attractive design and colors . . . low railing or glazed, with clear or obscure glass.

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ONLY *Hauserman* GIVES YOU ALL THESE FEATURES!

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- easy utility access
- complete movability
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- efficient sound control
- incombustible materials
- lifetime service
- functional design
- responsible manufacturer

Panel faces are permanently flat, free of waves and buckles . . .

All joints are tight; no rough or exposed edges . .

Gauge and construction of panel faces and structural members are sufficient to withstand long usage without denting or buckling . . .

Balanced design of partitions, wainscoting, doors and accessories presents harmonious, permanent look . . .

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No exposed screw heads or fastenings to mar good-looking appearance . . .

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HORIZON—Beautiful, color brochure shows how HAUSERMAN's revolutionary new HORIZON WallSystem offers virtually unlimited freedom of artistic expression. System includes custom selection of panel materials, glass patterns, post shapes, module, and feature inserts. Send for your free copy today.

Type AL, "LIGHT, BRIGHT AND BEAUTIFUL"—This brochure vividly presents HAUSERMAN's new System of movable interior walls built of durable, versatile REYNOLDS aluminum. See for yourself how TYPE AL Walls make custom interiors a practical reality. Send for your free copy today.

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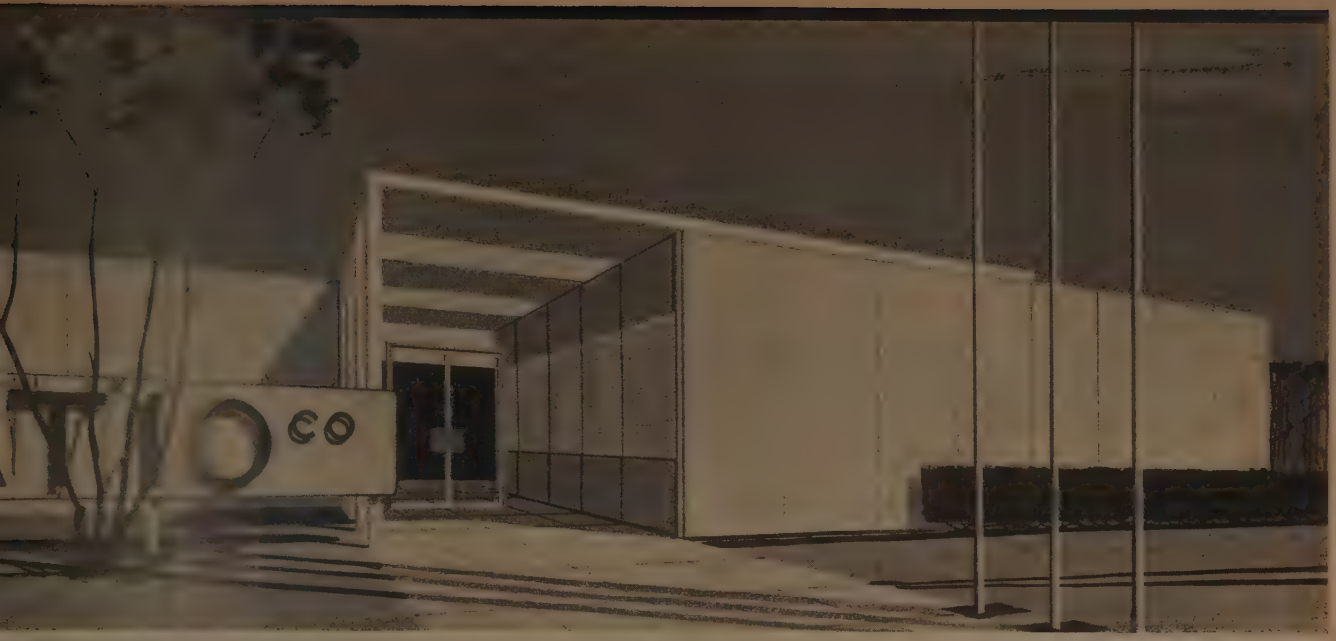
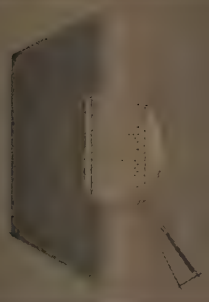
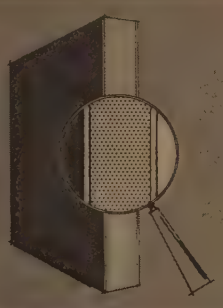




EXTERIOR
Porcelain Enamel Finish
Light Gauge Sheet Steel
Tempered Hardboard
Metal Moisture Barrier*



INTERIOR
Porcelain Enamel Finish
Light Gauge Sheet Steel
Tempered Hardboard
Aluminum Foil Moisture Barrier*

*Porcelain interior finish can be obtained on special order

for ineriors and exteriors...

New Kawneer Color Wall

PORCELAIN ENAMEL PANELS OF STEEL—for gas station walls, sign panels, fascias, facades, bulkheads, chain store identification—for unlimited exterior and interior applications—everywhere that long-lasting, fade-proof color is needed.

- Lifetime porcelain enameled finish won't fade, crack or craze—resists weather, sunlight and corrosion.
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- Color Walls complementary to ¼" glass and is easily installed as window wall and spandrel panels.
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- Economical—lower in cost than pan-type porcelain. Production techniques and ease of installation keep costs down.
- Complete line of aluminum mouldings for simple, fast Color Wall installation.

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stock flat surface: Strong Blue, Teal, Turquoise, Black, Pepper Green, Ash Gray, White, Jasmine Yellow, Deep Red, Sunset Red.

stock stippled surface: Pastel Blue, Mint Green.

custom: special colors on order. Contact your local Kawneer Representative.

Serving Architecture and Industry
Kawneer
ARCHITECTURAL PRODUCTS DIVISION
since 1906

AIA FILE NO. 15-M1

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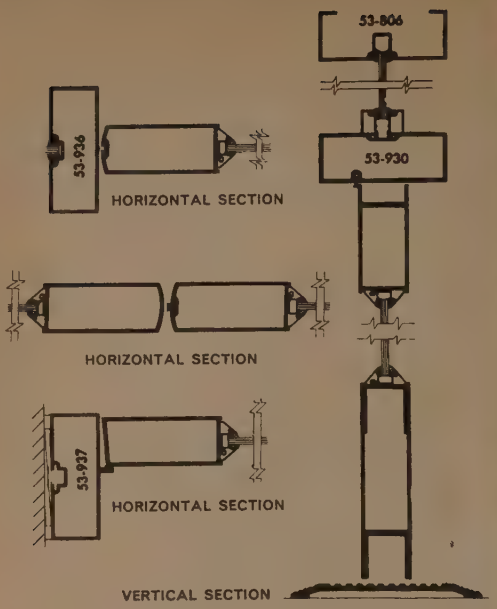
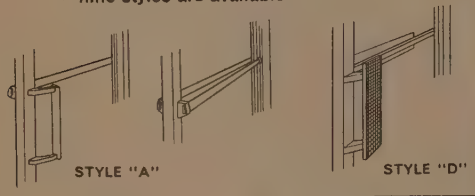
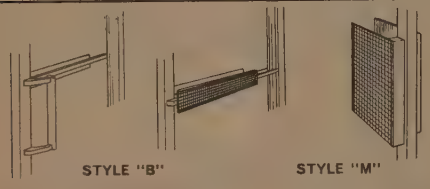


BROADEST HARDWARE CHOICE
—nine styles are available





New Kawneer wide stile School Door

New economy for heavy traffic installations.... schools, institutions, supermarkets

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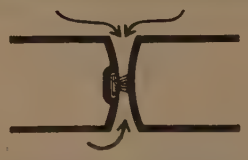
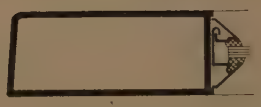
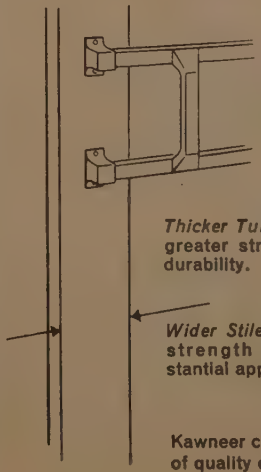


Weathered Meeting Stiles mean less heat and cool air loss...greater customer comfort.

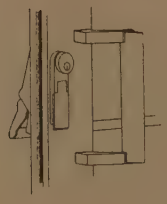


Snap-On Square Or Beveled Glass Stops for faster glazing, neater appearance.



Thicker Tube Wall for greater strength and durability.

Wider Stiles for more strength and substantial appearance.



KAWNEER PANIC DEVICE for institutional applications. Other approved panic devices may also be applied.

Kawneer continues to lead the field with the most complete line of quality door and entrance units.

Exciting NEW CONCRETE

DEMANDS
MEDUSA
PORTLAND CEMENTS

Medusa Portland Cements are favorites in all the new, outstanding uses of concrete. These cements have outstanding advantages over regular portland cements, in that there's a type for every possible modern concrete need. For example, prestressed concrete, thin-shell concrete and curtain wall panels can be left exposed and unpainted when made beautifully white or tinted with Medusa White Portland Cement. Similarly, Medusa Waterproofed Cements make all exposed modern concrete shapes impervious to water, keeping them whistle-clean while shedding dirt-laden water.

Last, but by no means least, when mortar is required for modern concrete panels and masonry units, Medusa StoneseT White Masonry Cement and Medusa BrikseT Gray Masonry Cement make beautiful, sound mortar joints.

The Medusa salesman near you will be glad to show you how we work with architects in improving modern concrete construction. Contact him direct, or drop us a letter today!

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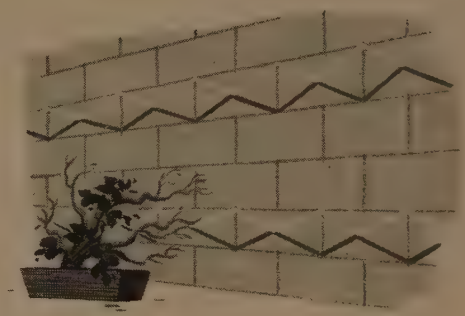
Bold Patterned MASONRY

Revolutionary patterned concrete masonry units are here! Unexcelled for creating striking architectural designs, these beautiful blocks *demand* the greatest care in the selection of cements to accent and protect their beauty.

To bring out the beauty in these patterned block, Medusa White Portland Cement (plain or waterproofed) should be used. These cements shut out dirt-laden water that will mar their beauty.

Today's emphasis on patterned masonry also demands that the mortar between the units must be as beautiful and strong as possible. This means Medusa BrikseT Gray Masonry Cement and Medusa StoneseT White Masonry Cement for mortar joints that minimize staining and give complete color uniformity from wall edge to wall edge. Get complete information on Medusa Cements.

Mail the postage-free card for free catalogs today.



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  Use Medusa Job Fitted Cements

GRAY PORTLAND CEMENT (plain or waterproofed)
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MEDUSA WHITE PORTLAND CEMENT (plain or waterproofed)
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MEDUSA WHITE TILE GROUT CEMENT
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OVER SIXTY-FIVE YEARS OF CONCRETE PROGRESS

SEE HOW STRAN-STEEL'S COMPLETE BUILDING SYSTEM CAN CUT CONSTRUCTION COSTS

Stran-Steel's completely integrated building system is designed to provide permanent, noncombustible commercial and industrial structures at the lowest possible cost. How?

Stran-Steel lightweight components—joists, studs and channels, columns, beams, curtain wall and ribbed decking—are engineered so that each part fits perfectly with every other part. There is little or no special fabricating required. Buildings go up *fast*—with less bridging, better lateral beam support and no welding!

Stran-Steel's distinctive nailing groove makes it possible to apply collateral materials directly with ordinary nails. Wide flange beams, in a variety of sizes, are especially adaptable to multiple-floor projects. They save space and materials, and eliminate beam boxing and false ceilings.

Every man-hour of construction time saved is money saved for your clients. Ask your nearest Stran-Steel dealer how he can help you provide your clients with the best design at the lowest cost. Stran-Steel dealers are listed in the Yellow Pages under *Steel*.

Stran-Steel's Basic Architectural Products

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Detroit 29, Michigan • Division of
NATIONAL STEEL CORPORATION

For More Information, Use Postage-Free Postcard at Back of Book

Coming early this summer!

BOLD NEW CRANE PRODUCTS

—and an exciting new color

Across the page you see five important Crane developments . . . the first results of a new, forward-looking program at Crane.

These new products will be available early summer, 1958. We believe they're the kind of products that can make a big difference in your plans this year.

Why not work them into your projects? Ask your Crane Representative for descriptive color folder. And keep in touch with him for more information on Crane's new program of products, designs, and ideas.

CRANE

THE PREFERRED PLUMBING

CRANE CO. 836 S. Michigan Ave., Chicago 5 • VALVES • FITTINGS • PIPE • PLUMBING • KITCHENS • HEATING • AIR CONDITIONING

NEW! ***Crane Crown "Round" Lavatory***— graceful new Dreyfuss-designed lavatory that installs in any type of countertop.

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NEW!

Crane Superior Glass-Lined Water Heater—with a new kind of burner, new concept in tank design, new styling by Henry Dreyfuss.

NEW!

Crane Walsan "Off-the-floor" Closet—Saves space! Projects only 22″ from wall. Tank concealed between 2″ x 6″ studding on 16″ centers.

plus an exciting new Crane color

Desert Turquoise

created by modern designers and decorators for all Crane fixtures

LUDMAN WINDOW ENGINEERING

THREE PROVEN ADVANTAGES *to architects*

- **TECHNICAL CO-OPERATION**
- **PRE-TESTED PERFORMANCE**
- **BUILDING-LIFE DURABILITY**

From drawing board to completion, an architect can always rely on Ludman Engineering Service to keep pace with his architectural vision. Ludman engineers, designers, craftsmen, are constantly developing, testing, planning for the future. That is why Ludman is able to match architectural vision with superb window engineering that reduces construction time and costs, yet is always beautiful, efficient and flexible.

For instance, Ludman Curtain Walls are readily adaptable to the architect's specifications of design, budget and code restrictions. Ludman Auto-Lok Aluminum Awning Windows and Ludman Aluminum Projected Windows co-ordinate with curtain wall treatment to increase the grace and effectiveness of the proposed structure.

Because Ludman sets the pace for the future through the creation of high standards far beyond the most stringent laboratory requirements, architects very naturally specify:

"Ludman Auto-Lok or Ludman Projected Windows—Without Equal!"

Our Engineering Service is available for consultation at any time . . . entirely without obligation to you.

LUDMAN Auto-Lok ALUMINUM WINDOWS

The finest awning window ever made! Unique extruded elastromeric vinyl weatherstripping, plus famous patented automatic self-locking action and double contact, seals Auto-Lok tighter than a refrigerator!

Other Ludman Products

LUDMAN WINDO-TITE ALUMINUM WINDOWS
LUDMAN JALOUSIES & JALOUSIE DOORS
LUDMAN ALL-WEATHER ALUMINUM SLIDING GLASS DOORS

LUDMAN Auto-Lok AUTOMATIC LOCKING

See SWEET'S Arch. File
AUTO-LOK AWNING & PROJECTED WINDOWS 17a/Lu
CURTAIN WALL 3d/Lu

LUDMAN LEADS IN WINDOW ENGINEERING

SETS THE PACE FOR THE *FUTURE*

CURTAIN WALL BY LUDMAN
University of Miami Law Building
Architect: Robert M. Little, Miami
Contractor: Fred Howland, Miami

LUDMAN CURTAIN WALLS

From the basic treatment of integral wall units that combine window and wall in one easily handled, quickly fastened, labor-saving unit, Ludman Curtain Walls are easily adaptable to any wall treatment the architect desires, offering a wide range of materials, color and texture for interior and exterior walls.

LUDMAN INTERMEDIATE ALUMINUM PROJECTED WINDOWS

Pittsburgh Testing Laboratory tests indicate Ludman Projected Window, tested 10 times tighter (air infiltration), 4 times stronger (uniform load), 4½ times stronger (hardware load). The finest quality Projected Windows ever marketed, precision engineered to high Ludman standards.

For further information on any Ludman product check the self-addressed Ludman postcard in back of this issue, or write to:

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LUDMAN LEADS IN WINDOW ENGINEERING

A distinctive new approach

This actual unretouched photograph of Matico Tweed Tile and a swatch of expensive carpeting shows how successfully Tweed duplicates the beauty and desirable textured look of wall-to-wall carpeting in low-cost Asphalt and Vinyl-Asbestos Tile.

to tile styling

MATICO TWEED *Collection*

Achieves the striking "textured" look of luxurious carpeting in Asphalt and Vinyl-Asbestos Tile

The remarkable, original design of Matico Tweed Collection makes it an ideal choice for installations where outstanding appearance is an essential requirement. Available in six brilliant "textured" colors, Tweed captures all the beauty of wall-to-wall carpeting in low cost tile. Produced in Asphalt and Vinyl-Asbestos, this fine tile flooring is just as practical as it is handsome. Tweed is long-wearing, easy and economical to maintain and can be installed on suspended double wood floors, suspended concrete floors and concrete floors on and below grade.

Specification Data:
Size: 9" X 9" Thicknesses: Asphalt 1/8"; Vinyl-Asbestos: Std. Gauge & 1/8"

QUALITY CONTROLLED
MATICO PRODUCTS

MASTIC TILE CORPORATION OF AMERICA
Houston, Tex. • Joliet, Ill. • Long Beach, Calif. • Newburgh, N. Y.
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For a complete set of free color samples, mail the coupon below. And be sure to consider Matico Tweed Collection when next you specify tile flooring.

8A506

Mastic Tile Corp. of America, P.O. Box 128, Dept. 29-3, Vails Gate, N. Y.
Please send me free color samples of Matico Tweed Collection.

Name _____

Address _____ City _____ Zone ____ State _____

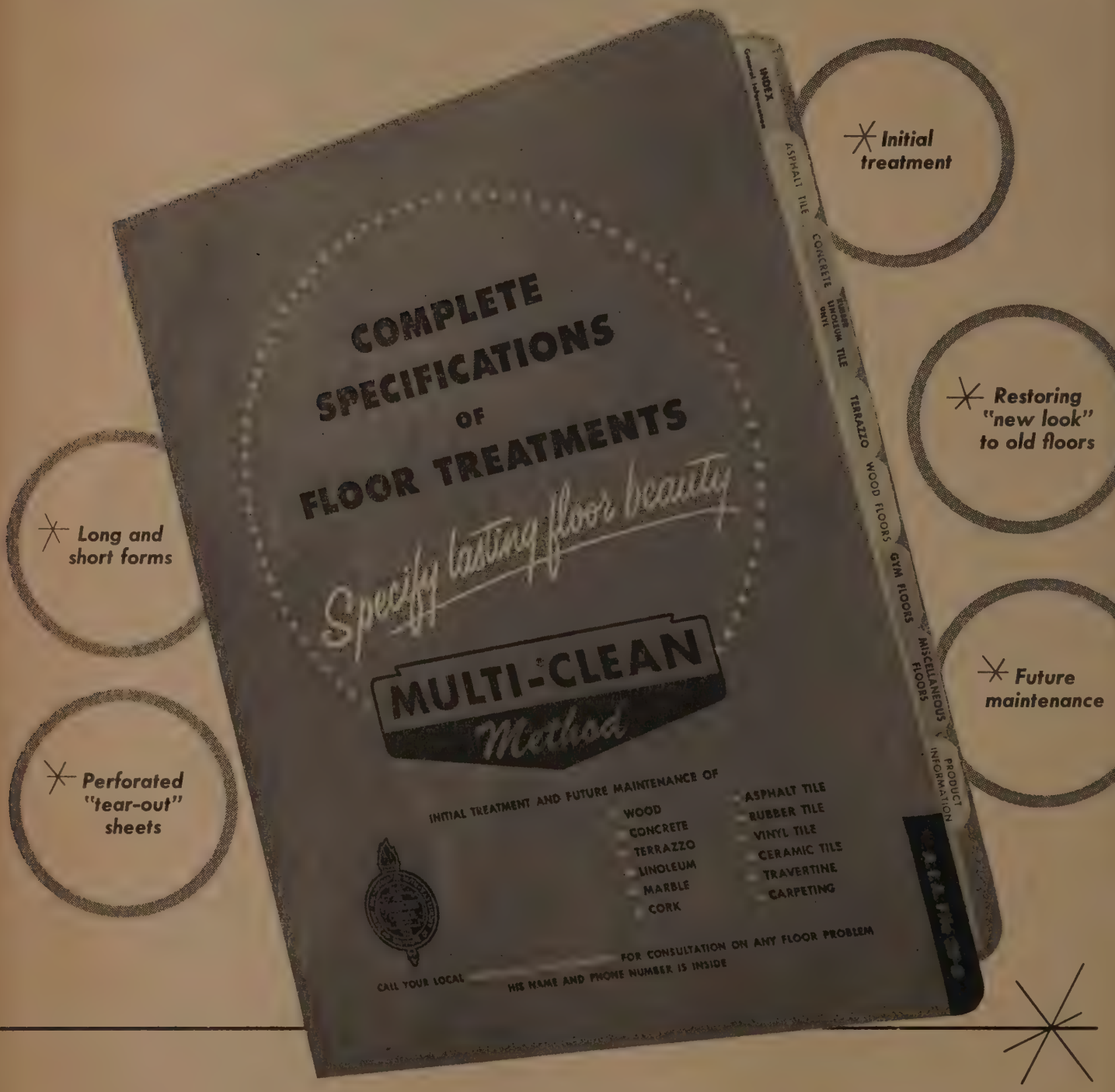
Complete Specifications for proper treatment of all type floors *(use the card at the back of this bulletin to order your free copy)*

Here, in handy perforated "tear-out" form, are complete specifications for treatment of all type floors.

Bound ten-sheets-to-a-pad, there are separate sections for asphalt tile, concrete, rubber tile, terrazzo and oxychloride, vinyl and vinyl asbestos, and wood. Ceramic tile, cork, linoleum and marble are also included.

These specifications are based on the scientific MULTI-CLEAN METHOD. They cover initial treatment of new floors, future maintenance, and restoring the new look to old floors. Both long and short forms are included for your convenience.

Expert local consultants. A trained MULTI-CLEAN floor maintenance specialist is available in every metropolitan area where there is a Chapter of The Producers' Council. He'll be glad to assist you in any floor care problem you may have. If he's not listed in your telephone directory, write to MULTI-CLEAN PRODUCTS, INC., St. Paul 16, Minnesota, for his name.



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MULTI-CLEAN® Method

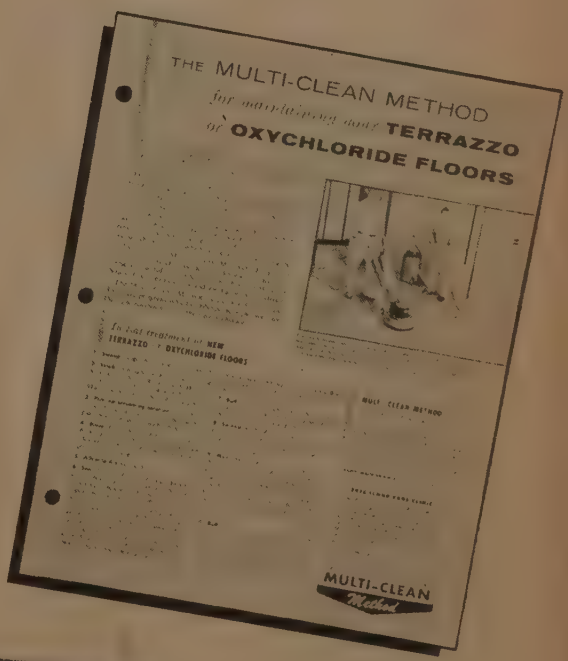
How to bring out the Full Beauty in Terrazzo or Oxychloride

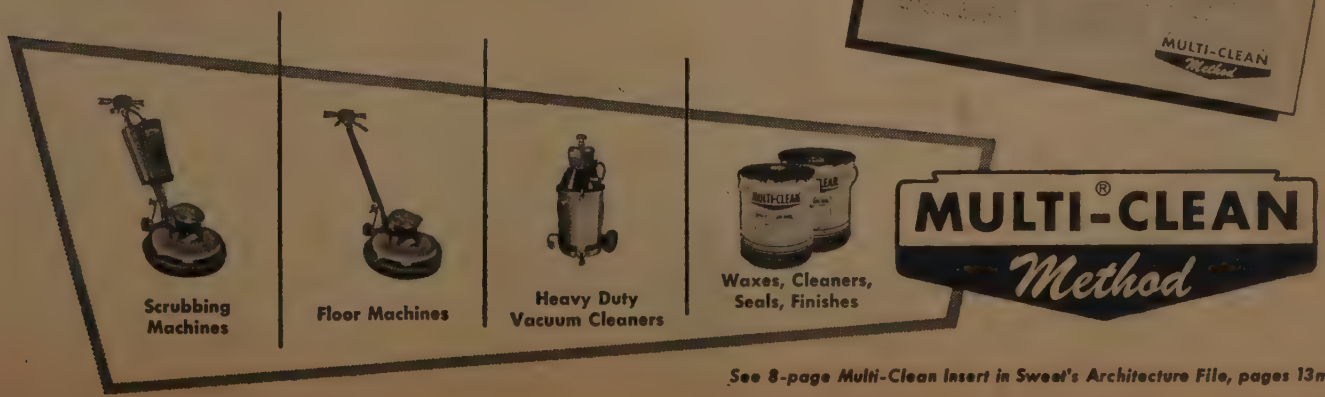
Few, if any floors, possess the potential beauty of Terrazzo or Oxychloride . . . but all too often their rich colors are lost beneath a dingy film of grime.

The MULTI-CLEAN METHOD is a complete, scientific floor care program designed to preserve and accentuate this natural beauty. Cleaned with fast-acting-but-gentle Blue Blazes cleaner, protected with crystal-clear MULTI-CLEAN Terrazzo Sealer and a light colored Waterproof Floor Wax, Terrazzo and Oxychloride surfaces resist soiling and are easier to maintain.

The MULTI-CLEAN METHOD *consists of the right material, the right equipment, and the right technique.*

There's a separate MULTI-CLEAN METHOD for each type floor . . . asphalt tile, concrete, rubber tile, terrazzo and oxychloride, vinyl and vinyl asbestos tile, and other floors. For step-by-step instructions or handy, ready-to-use specifications, phone your local MULTI-CLEAN Floor Care Specialist or use the card in the back of this bulletin.





See 8-page Multi-Clean Insert in Sweet's Architecture File, pages 13m MU.

the new WINCO

SERIES 800 PROJECTED ALUMINUM WINDOW

Now ready for prompt delivery in all standard sizes with your choice of vent arrangements

NEW DESIGN
Developed not only to give greater strength to frame members, but also to provide greater rigidity in sash as well.

ADJUSTABLE FRICTION SHOES
They ride in side channels of frame. Simple adjustment for good balance so opening and closing is with a smooth, easy action.

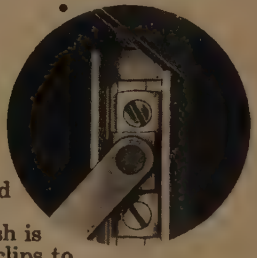
ADJUSTABLE
Arm assembly that permits close adjustment to give snug fit of sash to frame.

PILE WEATHERSTRIP
Extends around entire sash opening. Seals out air so effectively it gets .5 score on infiltration tests.

The Sash Seals Air-tight . . .
The Frame Installs Water-tight

NICKEL BRONZE HARDWARE
Modern and streamlined in design, yet having strength required to give a lifetime of trouble-free service.

ADJUSTABLE KEEPERS
Makes for snug fitting project in vents without strain and takes fullest advantage of weather-strip's flexible seal.



EASIER GLAZING
Sash easily removed, and is available for either interior or exterior glazing. Extruded glazing bead optional at small additional cost. Sash is equipped with equalizer clips to prevent racking during glazing period.

WINCO VENTILATOR COMPANY

WINCO

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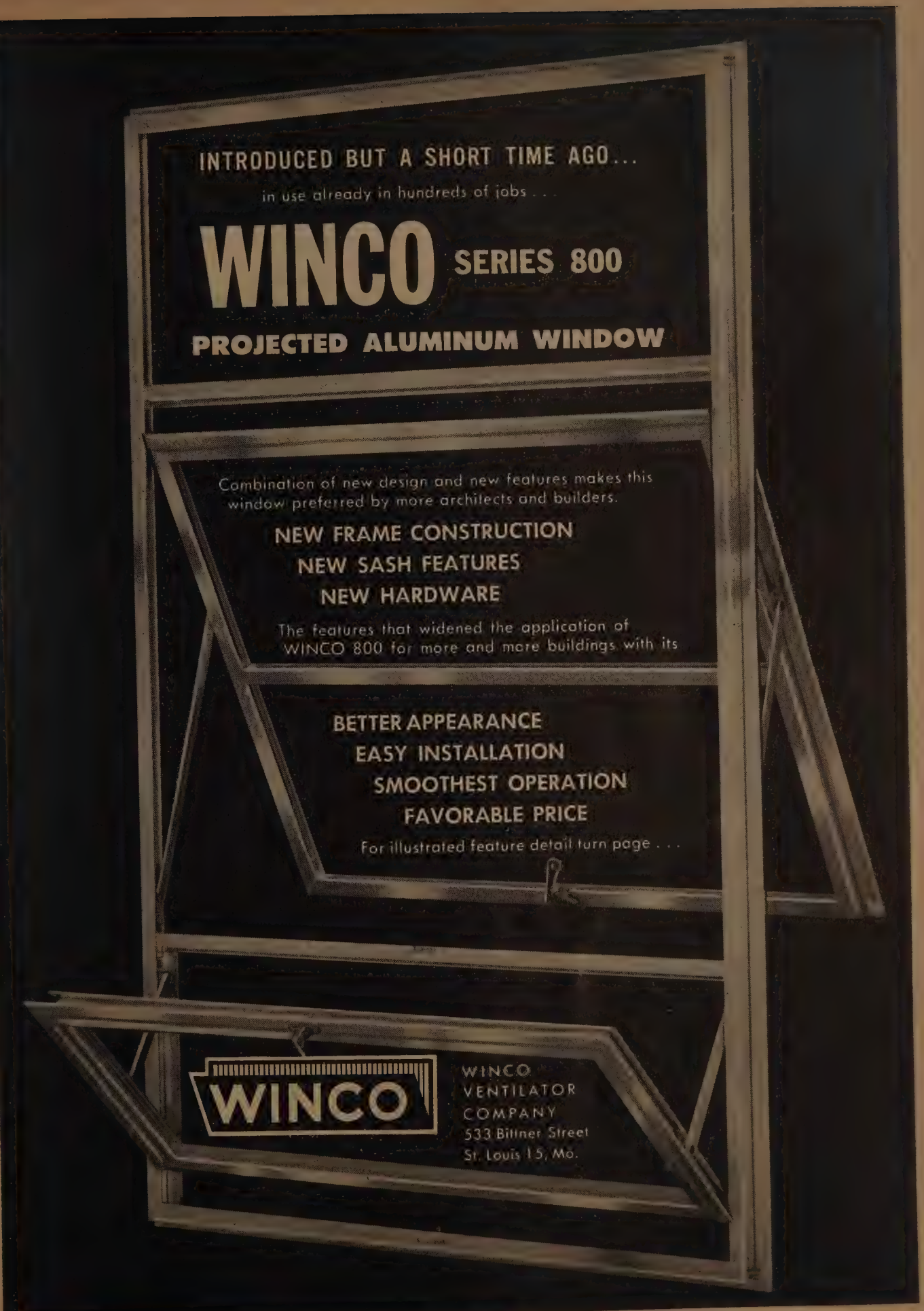
533 Bittner Street • St. Louis 15, Mo.


INTRODUCED BUT A SHORT TIME AGO...
in use already in hundreds of jobs . . .
WINCO SERIES 800
PROJECTED ALUMINUM WINDOW
Combination of new design and new features makes this window preferred by more architects and builders.
NEW FRAME CONSTRUCTION
NEW SASH FEATURES
NEW HARDWARE
The features that widened the application of WINCO 800 for more and more buildings with its
BETTER APPEARANCE
EASY INSTALLATION
SMOOTHEST OPERATION
FAVORABLE PRICE
For illustrated feature detail turn page . . .
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New! The Andersen Strutwall...

a modular component that joins window and wall!

Factory assembly gives tighter, trouble-free fit; saves labor; simplifies and speeds construction!

Here's a great advance in fenestration. A new building component that makes a quality window an integral part of the house frame. Offers tremendous advantages to architects everywhere.

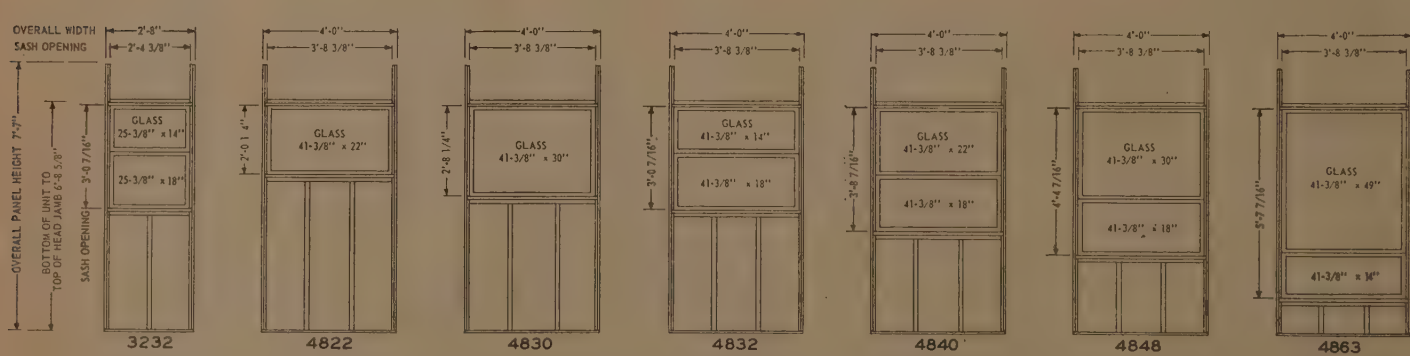
Precision factory assembly of load-bearing side struts, nailers and lower jack studs gives the new Andersen Strutwall unusual resistance to racking. Provides the tightest possible joining of window and wall. Cuts framing and installation two-thirds—from around 22 steps to 7.

To install the new Strutwall, the two load-bearing struts are cut to fit the header construction used. The component is nailed to adjacent studs, tilted up with the wall. Such simplicity practically eliminates the chance of carpentry errors—and callbacks.

There are even bigger advantages in mullions and larger openings. New Strutwalls are simply butted against each other. Because there's structural support at 4-foot intervals, nothing heavier than two 2 x 6 headers are needed in single story construction.

The new Andersen Strutwall fits any type of frame construction—including panel systems. It's been perfected and proved by field tests all over the country.

The Strutwall is sold throughout the United States and Canada. For more information or specification data, write Andersen Corporation, Bayport, Minnesota.



Available in 7 sizes, 2 styles! Andersen makes seven sizes of the new Strutwalls, two sizes of Strutwall door frames. Window components include both famous Beauty-Line* and Flexivent® styles.

*Patent pending.

Andersen Windowalls

TRADEMARK OF ANDERSEN CORPORATION

ANDERSEN CORPORATION • BAYPORT, MINN.

Simple, error-proof construction! Just cut two load-bearing struts to fit header construction. Nail Strutwall to adjacent studs, tilt up with the wall. This cuts installation steps two-thirds. Practically eliminates chance of carpentry errors and callbacks.

Saves materials, costs less installed! New Andersen Strutwall eliminates the two long cripples on the left, requires two 2x6's instead of heavier headers in multiple openings. Builders report a good saving in total installed costs—even when figured against inferior conventional windows.

Fits tighter, looks better! Because all parts of the Strutwall are nailed and glued at the factory, you get unusual resistance to racking —the tightest possible joining of window and wall. Famous Beauty-Line and Flexivent styles add beauty and sales appeal to your homes.

"as soon as these

call the HILLYARD Maintaineer!"

TRAINED TECHNICAL SUPERVISION is all-important to protect newly-laid floors during interior finishing—through clean-up and initial treatment. This is the service that the Hillyard "Maintaineer®" renders when he acts, without charge, as your Job Captain.

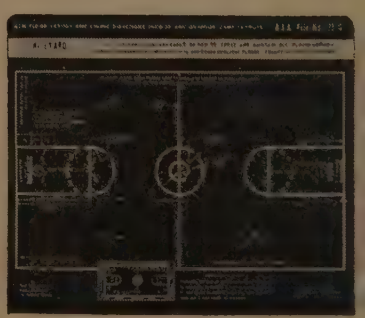
Under his guidance, the floor treatments you specify are applied to best bring out flooring beauty—to assure continuing client satisfaction with floors that hold their appearance, wear well, and are economical to maintain.

The Maintaineer is not interested in merely selling drums of product. He comes to you as your own skilled consultant in a highly specialized field. He will gladly survey the floors on your boards—discuss your objectives and problems—recommend specialized treatment products and methods of application. He serves as your Job Captain. After application, he follows up to help on any problem that may arise.

His job has only begun when you specify.

The Hillyard Maintaineer is
"On Your Staff, Not Your Payroll"

ASK FOR HILLYARD



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IN SWEET'S ARCHITECTURAL FILE
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floors are laid . . .

Hillyard Floor Treatments are specialized . .

resilient

SUPER SHINE-ALL ®—for thorough clean-up prior to applying finish. Chemically neutral—will not damage any flooring. U/L approved slip-resistant.

SUPER HIL-BRITE ®—self-annealing, self-polishing water emulsion wax finish, made of 100% prime No. 1 Carnauba. Extra tough, elastic, long wearing. Deep gloss that buffs back again and again. Ends need for stripping. U/L approved slip-resistant.

SUPER HILCO-LUSTRE ®—synthetic finish with extra measure of slip resistance. Rich gloss. Long wear. Non-tacky — easy to maintain. U/L approved slip-resistant.

concrete

CEM-SEAL ®—seals moisture in new concrete for complete, dense cure; seals out all stains; prevents future dusting. Ends need for building paper, etc. Floor can be used in 4 hours.

SURFCOAT ®—heavy-duty finish, natural color.

COLORTONE ®—heavy-duty finish in choice of colors.

Note: either finish can be further protected by wax or dressing if desired.

wood

WOOD PRIMER—penetrating seal that fills wood cells, builds smooth, strong base for finish.

STAR ® **FINISH**—extra tough, elastic, no-glare, non-skid finish. Holds beautiful lustre in the floor.

SURFCOAT ®—heavy-duty seal and finish for industrial wood floors.

gymnasium

TROPHY ® **SEAL**—penetrating seal that conditions floor for a lighter, smoother, more durable finish.

TROPHY ® **FINISH**—smooth, hard, extra-light finish with more than twice the wear of any other gym finish. No-glare, non-skid, non-rubber burning. U/L approved slip-resistant.

terrazzo

TERRAZZINE ®—seals moisture in new terrazzo for hard, dense cure; seals out all stains; prevents future dusting. Ends need for building paper, etc. Quick dry.

SUPER ONEX-SEAL ®—brings out brilliant colors of the marble. Seals surface for longtime wear. Non-tracking. Ends need for waxing.

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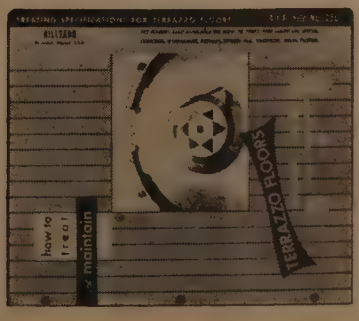

Practical specifying guides, with product information, Architect's specifications, and detailed step-by-step application instructions for use by your contractor. Separate files for each type of floor.

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Mellon Square
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AMERICAN AIR FILTER COMPANY, INC.
HERMAN NELSON UNIT VENTILATOR PRODUCTS
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433 Highland Ave., N. E.
Atlanta, Ga.

AMERICAN OLEAN TILE CO.
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Lansdale, Pa.

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Holyoke, Massachusetts

Detroit Controls Corporation
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Detroit 8, Michigan

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Kewanee, Illinois

Ross Heat Exchanger Division
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Youngstown Kitchen Div.
Warren, Ohio

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Bayport, Minnesota

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ARMSTRONG CORK COMPANY
Lancaster, Pa.

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Lawrence, Massachusetts

BRUCE, E. L., COMPANY
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Cincinnati 15, Ohio

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Carthage, Missouri

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Chicago 3, Ill.

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1254 LaBrosse Street,
Detroit 32, Michigan

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195 Belgrove Drive
Kearny, New Jersey

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P. O. Box 401
Trenton 3, N. J.

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Midland, Michigan

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Midland, Michigan

Styrofoam Div.
Midland, Michigan

Styron Div.
Midland, Michigan

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Bridgeport 2, Connecticut

FENESTRA, INC.
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1103 East Kibby Street, P. O. Box 328
Lima, Ohio

FIAT METAL MANUFACTURING COMPANY
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Franklin Park, Ill.

THE FLOUR CITY ORNAMENTAL IRON COMPANY
2637 27th Ave. South
Minneapolis 6, Minn.

FLYNN, MICHAEL, MANUFACTURING COMPANY
700 E. Godfrey Ave.,
Philadelphia 24, Pa.

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301 Mission St.,
San Francisco 19, Calif.

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TRINITY WHITE CEMENT DIVISION
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4422 N. Ravenswood Ave.
Chicago 40, Ill.

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FLOORING SALES DIVISION
Watertown 72, Mass.

GRANCO STEEL PRODUCTS COMPANY
6506 N. Broadway St.
St. Louis, Mo.

GUTH, EDWIN F., COMPANY
2615 Washington Blvd.
St. Louis, Missouri

HAUSERMAN, THE E. F., COMPANY
6800 Grant Avenue,
Cleveland 5, Ohio

HILLYARD CHEMICAL COMPANY
P. O. Box 909
St. Joseph 1, Mo.

HOLCOMB & HOKE MANUFACTURING COMPANY, INC.
1545 Van Buren St.
Indianapolis 7, Indiana

HOUGH MANUFACTURING CORPORATION THE
1029 S. Jackson Street
Janesville, Wisconsin

HUNTER DOUGLAS ALUMINUM CORPORA
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405 Lexington Ave.
New York 17, N. Y.

HYDRAULIC PRESS BRICK COMPANY
705 Olive St.
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AND STEEL PRODUCTS COMPANY
Milwaukee 1, Wisconsin

Subsidiary follows:

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New York 16, N. Y.

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Michigan City, Indiana

SER ALUMINUM & CHEMICAL SALES, INC.
919 No. Michigan Ave.
Chicago 11, Illinois

WNEER COMPANY
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Niles, Michigan

ITILE, INC.
58 Second Avenue,
Brooklyn 15, N. Y.

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AR PRODUCTS DIVISION
Koppers Bldg.
Pittsburgh 19, Pa.
Wood Preserving Div.

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N CLOSERS, INC.
Princeton, Ill.

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Toledo 3, Ohio

OMAN CORPORATION
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N. Miami, Florida

STER BUILDERS COMPANY, THE
7016 Euclid Ave.,
Cleveland 3, Ohio

STIC TILE CORP. OF AMERICA
Newburgh, New York

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230 Park Avenue
New York, N. Y.

Subsidiary follows:

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Milwaukee 3, Wisconsin

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Cleveland 10, Ohio

NNEAPOLIS-HONEYWELL REGULATOR
COMPANY
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Minneapolis 8, Minn.

IESOTA MINING & MANUFACTURING
MPANY
dhesives, Coatings & Sealers Div.
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etroit 2, Michigan

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more, L. I., New York

CH METAL WEATHERSTRIP
ORATION
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Louis 14, Mo.

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MOSAIC TILE COMPANY, THE
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Lorain, Ohio

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OVERLY MANUFACTURING COMPANY
574 W. Otterman St.,
Greensburg, Pa.

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47 Stewart Avenue,
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Richmond, Ind.

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40 Central Street
Boston 9, Mass.

PITTSBURGH PLATE GLASS COMPANY
1 Gateway Center
Pittsburgh 22, Pa.

POMEROY, THE S. H., COMPANY
25 Bruckner Blvd.,
Bronx 54, N. Y.

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R. O. W. SALES COMPANY
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Ferndale 20, Michigan

RAMSET FASTENERS, INC.,
WINCHESTER-WESTERN DIVISION,
OLIN MATHIESON CHEMICAL
CORPORATION
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Canton 5, Ohio

TRUSCON STEEL DIVISION
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Aurora, Illinois

RICHMOND SCREW ANCHOR COMPANY, INC.
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ROBERTSON, H. H., COMPANY
Farmers Bank Building,
301 Fifth Ave.,
Pittsburgh 22, Pa.

ROBINSON BRICK & TILE CO.
500 S. Santa Fe Drive
Denver, Colorado

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Marshfield, Wisconsin

ROHM & HAAS COMPANY
222 W. Washington Square
Philadelphia 5, Pa.

ROLSCREEN COMPANY
Pella, Iowa

SANYMETAL PRODUCTS COMPANY, INC.
1705 Urbana Road,
Cleveland 12, Ohio

SARGENT & COMPANY
45 Water St.,
New Haven 9, Conn.

SCHLAGE LOCK COMPANY
2201 Bayshore Blvd.,
San Francisco, Calif.

SECURITY FIRE DOOR COMPANY
3044 Lambdin Ave.,
St. Louis 15, Mo.

SEDGWICK MACHINE WORKS, INC.
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New York 11, N. Y.

SIMPSON TIMBER COMPANY
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Seattle 1, Washington

Operating companies follow:

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Plywood and Door Division
Shelton, Washington

Simpson Logging Company
Insulating and Acoustical Div.
Shelton, Washington

Simpson Redwood Company
P.O. Box 1002
Eureka, California

SPENCER TURBINE COMPANY, THE
486 New Park Avenue
Hartford 6, Conn.

STANLEY WORKS, THE
195 Lake Street
New Britain, Conn.

STRAN-STEEL CORPORATION
(Sub. of National Steel Corp.)
Ecorse, Detroit 29, Michigan

STYLON CORPORATION
Sandyville, Ohio

SUPER CONCRETE EMULSIONS LTD.
1372 E. 15th St.,
Los Angeles 21, Calif.

P. (

SWEDISH CRUCIBLE STEEL CO.
8801 Conant Avenue
Detroit, Michigan

TAYLOR, THE HALSEY W., COMPANY
137 North St.,
Warren, Ohio

TECTUM CORPORATION
105 South 6th St.
Newark, Ohio

TIMBER STRUCTURES, INC.
3400 Yeon Avenue
Portland 10, Oregon

TREMCO MANUFACTURING COMPANY, THE
8701 Kinsman Road,
Cleveland 4, Ohio

TYLER, THE W. S., COMPANY
3615 Superior Avenue, N.E.,
Cleveland 14, Ohio

UNISTRUT PRODUCTS COMPANY
933 Washington Blvd.,
Chicago 7, Illinois

U. S. CERAMIC TILE COMPANY
217 4th St., N. E.,
Canton 2, Ohio

Subsidiaries Follow:

Ceramic Tile Panels, Inc.
217 4th St. N.E.
Canton, Ohio

Sparta Ceramic Co.
East Sparta, Ohio

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55 W. 44th Street,
New York 36, N. Y.

UNIVERSAL ATLAS CEMENT COMPANY
100 Park Avenue,
New York 17, N. Y.

UNIVERSAL CORPORATION
6710 Denton Drive,
Box 7205,
Dallas 9, Texas

UNIVERSAL RUNDLE CORPORATION
P. O. Box 960
New Castle, Pa.

UVALDE ROCK ASPHALT COMPANY
Frost Bank Bldg.
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800 E. Bridge St.,
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101 Park Avenue,
New York 17, N. Y.
Division:
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VONNEGUT HARDWARE COMPANY
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Miami, Florida

WEBER SHOWCASE & FIXTURE COMPANY, INC.
5700 Avalon Blvd.
Los Angeles 11, Calif.

WESTINGHOUSE ELECTRIC CORPORATION
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Pittsburgh 30, Pa.

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Staunton, Va.

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Bridgeport 2, Conn.

Electric Appliance Division
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Elevator Division
150 Pacific Avenue
Jersey City 4, N. J.

Sturtevant Division
Hyde Park, Boston 36, Mass.

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533 Bittner St.,
St. Louis 15, Missouri

ZONOLITE COMPANY
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Chicago 3, Ill.

ZURN INDUSTRIES, INC.
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New York 22, N. Y.

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Great Neck, N. Y.

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New York 17, N. Y.

ASPHALT TILE INSTITUTE
101 Park Avenue,
New York 17, N. Y.

BETTER HEATING COOLING COUNCIL
250 Park Avenue,
New York, New York

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San Francisco 11, Calif.

EDISON ELECTRIC INSTITUTE
420 Lexington Ave.,
New York 17, N. Y.

INDIANA LIMESTONE INSTITUTE
Bedford, Indiana

MARBLE INSTITUTE OF AMERICA, INC.
32 South 5th Ave.,
Mount Vernon, N. Y.

MO-SAI ASSOCIATES
P.O. Box 606,
New Haven, Conn.

NATIONAL ASSOCIATION OF ARCHITECTURAL METAL MANUFACTURERS
228 North LaSalle Street
Chicago 1, Illinois

NATIONAL CONCRETE MASONRY ASSOCIATION
38 S. Dearborn St.,
Chicago 3, Illinois

NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
155 E. 44th St.,
New York 17, N. Y.

NATIONAL LUMBER MANUFACTURERS ASSOCIATION
1319 18th St., N. W.,
Washington 6, D. C.

NATIONAL MINERAL WOOL ASSOCIATION
2906 Americas Bldg.
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New York, N. Y.

NATIONAL OAK FLOORING MANUFACTURERS ASSOCIATION
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Memphis 3, Tenn.

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1500 Rhode Island Ave., N. W.,
Washington 5, D. C.

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711 14th St., N. W.,
Washington 5, D. C.

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332 S. Michigan Ave.,
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45 W. 45th St.,
New York 36, N. Y.

PLUMBING FIXTURES MANUFACTURERS ASSOCIATION
1145-19th St. N.W.,
Washington, D. C.

PONDEROSA PINE WOODWORK ASSOCIATION
39 South LaSalle Street
Chicago 3, Illinois

PORTLAND CEMENT ASSOCIATION
33 W. Grand Ave.,
Chicago 10, Ill.

STRUCTURAL CLAY PRODUCTS INSTITUTE
1520 18th St., N. W.,
Washington 6, D. C.

TILE COUNCIL OF AMERICA
10 East 40th St.,
New York 16, N. Y.

VERMICULITE INSTITUTE
208 S. LaSalle St.,
Chicago 4, Ill.

WEST COAST LUMBERMEN'S ASSOCIATION
1410 S.W. Morrison Street
Portland 5, Oregon

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COMPREHENSIVE
PRODUCT LITERATURE
LISTING

THE following 29 pages contain a most comprehensive listing of Product Literature published for architects use in requesting literature available from the Construction Industry. The catalogs listed on these pages are publications of member companies of The Producers' Council . . . manufacturers of quality building products.

These catalogs are listed according to the building material or materials which they cover. In some instances, when a catalog covers more than one material, it will be listed under each category covered by the contents of that particular piece of literature.

For your convenience in requesting individual catalogs, all pieces of literature are numbered in Bold Type preceding each individual listing. Immediately following this listing are Business Reply cards containing the catalog numbers. On each card please encircle the number of the catalog or catalogs which you desire. You will note that some of these cards will be returned directly to the manufacturer and others will be received by The Producers' Council. In either case, your request will be handled as quickly as possible.

The coupons found on pages 141 through 146 should be cut out and placed in an envelope and mailed to: PUBLICATIONS DEPARTMENT, THE PRODUCERS' COUNCIL, INC., 2029 K STREET, N. W., WASHINGTON, D. C. These coupons will be forwarded to the companies involved as quickly as possible, and all requests will be handled through January 1959. There is no time limit on the "no postage" reply cards and your requests will be handled as long as the literature is available.

ACOUSTICAL MATERIALS

Acoustical Materials Assn.

1. SOUND ABSORPTION COEFFICIENTS OF ARCHITECTURAL ACOUSTICAL MATERIALS. Up-to-date information on products manufactured by Association members. 1958. 8½ x 11. 32 pages. AIA No. 39-b.

2. THEORY AND USE OF ARCHITECTURAL ACOUSTICAL MATERIALS. Material presented is intended to serve as a basis for an intelligent appreciation of the problem of sound control in buildings, to explain the meaning of the terms used in the discussion of these problems, and to indicate the practical methods that have been found for their solution. Revised edition 1950. 8½ x 11. 20 pages. AIA No. 39-A.

Armstrong Cork Co.

217. ARMSTRONG ACOUSTICAL CEILINGS. Complete description, technical data, and specifications on Armstrong's Cushiontone, Travertone, Crestone, Minatone, Arrestone, Corkoustic, Custom Mina Board, and Cushiontone Roof Deck. 1958 Edition. 32 pages. 8½ x 11. AIA No. 39-B.

218. ARMSTRONG ACOUSTICAL CEILINGS SPECIFICATIONS. Individual Unabridged Architect's Specifications for the specifying and installation of each Armstrong Acoustical Material. Sheets have been perforated so that paragraphs which pertain to the particular job at hand can be removed and combined to form a complete specification. 8½ x 11. AIA File No. 39-B.

Celotex Corporation

57. CEILING DESIGN OPPORTUNITIES FOR ARCHITECTS WITH ACOUSTI-LUX TRANSLUCENT PANELS. Information on function, form, design, maintenance, cost opportunities, and dimension of Celotex translucent ceilings.

58. SOUND CONDITIONING FOR SCHOOLS AND COLLEGES. A discussion of sound conditioning material for use in schools.

59. ACOUSTICAL MATERIALS SECTION, SWEETS ARCHITECTURAL FILE. Description of Celotex acoustical products, physical properties, architectural details, and technical data. 1956. 8½ x 11. 20 pages. AIA No. 39-B.

60. CELOTEX PRODUCTS FOR SOUND INSULATION. TECHNICAL NOTE NO. 10f. Information covering construction of walls, floors, and ceilings for reduction of sound transmissions; complete with test data. 1952. 8½ x 11. 8 pages.

B. F. Goodrich Company

338. AIRPATH—Color plates, description, features and complete specifications for B. F. Goodrich AIRPATH Cushioned Rubber Floor Tile.

339. ACOUSTICAL PROPERTIES OF AIRPATH—Chart showing noise impact absorption of AIRPATH Floor Tile.

Inland Steel Products

372. ACCESS DOORS FOR ACOUSTICAL TILE INSTALLATIONS. New Milcor Metal Access Doors, for installation under the tiles, eliminate visual distraction and acoustical interruption of surface-installed doors. Catalog page #721A-6 gives complete information.

Johns-Manville Sales Corp.

384. JOHNS-MANVILLE SOUND CONTROL. Illustrations, description, construction details and acoustical data on various types of J-M acoustical ceiling units. 1957. 8½ x 11. 20 pages.

385. JOHNS-MANVILLE FIBRETEX ACOUSTICAL CEILING PANELS. Illustrations, description and installation details of these attractive, sound-absorbent fiberboard ceiling panels for residential and commercial use. 1957. 8½ x 11. 4 pages.

Owens-Corning Fiberglas Corp.

572. FIBERGLAS SOUND CONTROL PRODUCTS (1-AC-43). Properties, application data and specifications. 1956. 8½ x 11. 32 pages. AIA No. 39-B.

See **Vermiculite Institute** under VERMICULITE PRODUCTS.

ACOUSTICAL MATERIALS, MECHANICAL FASTENINGS

S. H. Pomeroy Co.

593. POMEROY SYSTEMS OF MECHANICAL FASTENINGS. Metal Studs and Furring for Non-bearing walls and ceilings. Continuous Metal Concrete Inserts. 1958. 4 pages. 8½ x 11.

See **Ramset Fastening System** under FASTENINGS.

Sanymetal Products Co.

158. SUSPENDED CEILING SYSTEMS, CATALOG NO. NSP-9. Four types of Sanymetal Suspended Ceiling Systems with complete specifications for each type and covering use with any type of ceiling and acoustical material; details of installation of different type ceiling materials illustrated and described. 1958. 8½ x 11. Color. 4 pages. AIA No. 39-B-1.

ADHESIVES

Miracle Adhesives Corp.

513. CONSTRUCTION BY ADHESION. Adhesives for Thin-Set Clay Tile Installations, Application of Insulation, Curtain Wall, and Industrial Applications. Industrial Caulkings and Non-Slip Coatings. 8½ x 11. 8 pages. MIRA DATA SHEET #1.

United States Plywood Corp.

682. DIRECTIONS FOR MIXING AND USING WELDWOOD GLUE. 4 page folder, 6 x 9. Form #53A.

683. HOW TO INSTALL PLYWOOD PANELING WITH WELDWOOD CONTACT CEMENT. 2 page instruction sheet. 8½ x 11, 2 colors. Form #1588.

Vermont Marble Co.

720. MARFIX BULLETIN. A superior cement for marble, granite, stone, glass, ceramic, wood, and any combination thereof. 4 pages. 8½ x 11 with 3 page insert giving technical information.

ADMIXTURES FOR CONCRETE

The Master Builders Company

472. MASTER BUILDERS REPORTERS. Pictorially illustrated case histories of construction and concreting problems encountered in various types of construction. Discussion covers the role of Pozzolith in achieving uniform, better quality concrete under widely varying conditions. Reporters are available on the following subjects: Hydraulic structures, 48 pages; Tunnels (Water, Highway & Railroad), 28 pages; Water & Sewage Works, 24 pages; Bridges (Highway & Railroad), 16 pages; Stadiums & Auditoriums, 20 pages; Tilt-up Construction, 12 pages; Slip-Form Work, 8 pages; Prestressed Structures, 20 pages. (All 8½ x 11).

473. EMBECO PRE-MIXED GROUT. A ready-to-use material for non-shrink grouting of building columns, anchor bolts, machinery and equipment. Discussion covers the need for a non-shrink grout, hot and cold weather grouting, and the measurable characteristics of EMBECO PRE-MIXED GROUT. 8½ x 11, 8 pages.

Super Concrete Emulsions Ltd.

161. INTEGRAL WATERPROOFING FOR CONCRETE. Contains information and technical data on advantages of Red Label Suconem in concrete mixtures. 4 pages. 8½ x 11. AIA No. 7-A-2.

ADMIXTURES FOR MORTAR

The Master Builders Company

474. OMICRON MORTARPROOFING FOR TIGHT BRICK WALLS. Illustrates how "O.M." aids workmanship and improves masonry mortar by insuring positive water reduction, increased

plasticity and cohesiveness. "O.M." provides greater bond strength for tight brick walls and reduced long term costs. 8½ x 11. 16 pages.

475. DESIGN AND SPECIFICATION OF WATERTIGHT MASONRY. A comprehensive summary of authoritative thought on the important elements involved in the construction of watertight masonry. Discussion covers: mortar ingredients and proportioning; compatibility of brick and mortar; separation cracks; control of shrinkage and bleeding; effect of mechanical disturbance; importance of proper protection. 8½ x 11. 6 pages.

Super Concrete Emulsions Ltd.

162. REDUCTION OF EFFLORESCENCE. In and general improvement of Masonry Mortars—contains information and technical data on Red Label Suconem "M" in all types of masonry mortars. 2 pages. 8½ x 11. AIA No. 3 L-1.

AGGREGATES

See **Vermiculite Institute** under VERMICULITE PRODUCTS.

Zonolite Co.

747. HOW TO DO IT MANUAL. Handbook on installation of all forms of Zonolite. G-45. 16 pages. 8½ x 11.

748. MACHINE PLACEMENT OF ZONOLITE PLASTER—ACOUSTICAL PLASTIC. Photos, general information on machine placement of lightweight plaster and acoustical plastic in private, industrial, commercial and institutional buildings. PA-29. 1955. AIA No. 21-A-5. 4 pages. 8½ x 11.

749. ZONOLITE PLASTER AND ACOUSTICAL SYSTEMS. Summary of fire tests, principle applications of Zonolite Plaster and Acoustical Plastic, specifications. PA-41. 1957. AIA #21-A-5. 8 pages. 8½ x 11.

750. THIN WALL SECTIONS OF ZONOLITE PORTLAND CEMENT PLASTER. Photos, diagrams, information on Zonolite vermiculite Portland Cement Plaster for spandrel, panel and curtain walls. CA-18. 1955. AIA #4-E-13. 4 pages. 8½ x 11.

AIR CONDITIONING

American Air Filter Co.

177. HERMAN NELSON HERNEL—COOL AIR CONDITIONER FOR SCHOOLS. This literature gives complete information on this year 'round system which provides natural cooling, heating, ventilating and mechanical cooling. Bulletin 675-A1. 20 pages. 8½ x 11, illustrated, 1956.

178. HERMAN NELSON NELSONAIRE REMOTE HEATING AND COOLING UNIT. For school offices and other non-classroom use. Bulletin 645-A1. 4 pages. 8½ x 11. 1957.

American Radiator & Standard Sanitary Corp.

195. REMOTAIRE ROOM CONDITIONERS—Vertical remote-type heating cooling units; operate with a central boiler and chiller. Specifications, data and dimensions available on free-standing and partially and totally recessed models. 1957. 8½ x 11. 8 pages. AIA No. 30-F-1-2.

196. REMOTAIRE ROOM CONDITIONERS—Horizontal remote-type heating cooling units; operate with a central boiler and chiller. Specifications, data and dimensions available on units with and without filter housing. 1957. 8½ x 11. 6 pages. AIA No. 30-F-1-2.

197. REMOTAIRE ROOM CONDITIONERS—Self-contained, in-the-wall heating-cooling units; no central cooling plant; specification data and dimensions available. 1956. 8½ x 11. 6 pages.

198. REMOTAIRE ROOM CONDITIONERS—Residential remote-type heating-cooling units; operate with a central boiler and chiller. Specifications, data and dimensions available on free-standing and partially recessed units for one and two stud-space installations. 1957. 8½ x 11. 6 pages.

199. WATER CHILLERS. Hermetically sealed, packaged, 2, 3, and 5 hp water cooled units; 2 and 3 hp air cooled units. Specifications, data and dimensions available. 1956. 8½ x 11. 8 pages. AIA No. 30-F-21.

200. WATER CHILLERS. Packaged 7½-125 hp units. Specifications, data and dimensions available. 1956. 8½ x 11. 48 pages. AIA No. 30-F-21.

201. WATER CHILLERS. Air-cooled 5 hp units with remotely located condenser. Specfications, data and dimensions available. 1957. 2 pages. AIA No. 30-F-21.

Minneapolis-Honeywell Regulator Co.

498. HONEYWELL ELECTRONIC AIR CLEANERS AC/ME MODELS CATALOG (76-3805). Describes the advantages of Electronic Air Cleaners, their operation and engineering. Shows how to specify the best size and model for any application, and provides suggested specifications. 1957, 8½ x 11, 2-color, 8 pages.

499. HONEYWELL ELECTRONIC AIR CLEANER PERFORMANCE STORY—Richfield State Bank (76-3774). Shows the advantages of electronic air cleaning in the Richfield State Bank building, a typical application. Briefly describes installation and operation of the Air Cleaner in the building's air handling system. 1957, 8½ x 11, 2-color, 4 pages.

500. HONEYWELL RENEW-AIR FILTER CATALOG (76-3839). Shows how odor absorption with activated charcoal air filters cuts air conditioning costs and increases comfort for occupants. Describes engineering of Honeywell Renew-Air Filters and shows how they are specified for air handling applications. 1957, 8½ x 11, 2-color, 4 pages.

501. CENTRALIZED ELECTRONIC CONTROL OF AIR CONDITIONING (76-3671). Discusses the advantages of centralized operation of air conditioning systems, especially in smaller buildings. Describes and illustrates two panels — CONTROL MASTER TM for air conditioning with up to seven zones; and ELECTRONIC AIR CONDITIONING SELECTOR for single-zone buildings. 1958, 8½ x 11, 2-color, 4 pages.

502. ELECTRONIC CONTROL PANELS FOR HEATING, VENTILATING AND AIR CONDITIONING (76-3367; 76-3364). Outlines advantages of the central control panel in electronic control systems. Specifications list, electrical ratings and model numbers included. 1957, 8½ x 11, 2-color, 2 pages.

503. HONEYWELL SUPERVISORY DATACENTERS — The Modern Approach to Air Conditioning Control (76-3803). Outlines the success of and advantages from centralizing the operation of air conditioning systems in the nation's most important buildings during the past three years. Discusses where used, cost, acceptance, technical service, component parts, and illustrates some of the most important products in Honeywell's unequalled line of commercial air conditioning controls. 1957-58, 8½ x 11, 2-color, 4 pages.

See **Minneapolis-Honeywell Regulator Co.** under ELECTRIC CONTROL SYSTEMS.

See **Vermiculite Institute** under VERMICULITE PRODUCTS.

AIR DIFFUSERS

S. H. Pomeroy Co.

594. POMEROY ENCLOSURES FOR AIR CONDITIONING, Blender Elements, Convectors and Radiators. 1958. 8 pages. 8½ x 11.

AIR FILTERS

Owens-Corning Fiberglas Corp.

573. FIBERGLAS DUST STOP AIR FILTRATION BANKS FOR COMMERCIAL AND INDUSTRIAL CENTRAL SYSTEMS (1-AR-174B). Fiberglas Dust Stop Filters and frames; properties, filter bank designs, installation procedure, operation and maintenance. 1956. 8½ x 11. 12 pages. AIA No. 30-D-3.

ALUMINUM PRODUCTS

Aluminum Company of America

15. ALCOA ALUMINUM IN ARCHITECTURE—1958, 8½ x 11, 19 pages. AIA File 15-J.

16. ALCOA ALUMINUM ACHIEVEMENTS IN ARCHITECTURE—1954-58, 8½ x 11. Detail sheets in folder, Series 100-1 to 100-26.

17. ALCOA ALUMINUM ARCHITECTURAL PRODUCTS—1954-58, 8½ x 11. Detail sheet in folder, Series 300.

18. ALCOA ARCHITECTURAL STOCKS CATALOG—1958, 8½ x 11½, 110 pages. Specifications and details for copings & gravel stops, window sills, thresholds, railings, tread products, sheet metal products, wire, rod, bar, structural shapes, fasteners, specialty products.

19. ALCOA INDUSTRIAL BUILDING PRODUCTS—1958, 8½ x 11, 35 pages. AIA File 12-C.

20. ALCOA PRODUCTS FOR INDUSTRIAL CONSTRUCTION—1958, 8½ x 11, 7 pages. AIA File 14-A.

21. ALCOA ALUMINUM ROOFING AND SIDING PRODUCTS—1958, 8½ x 11, 11 pages. AIA File 12-C.

22. CLEANING AND MAINTENANCE OF ALCOA ALUMINUM—1955, 8½ x 11, 14 pages. AIA File 13-E.

23. CARE DURING CONSTRUCTION OF ALCOA ALUMINUM—1955, 8½ x 11, 22 pages. AIA File 15-J.

24. HOW TO DO IT MANUALS—1955-58, 5¼ x 8¼. Forming, welding, machining, riveting.

25. PAINTING ALUMINUM STRUCTURES—1949.

26. PAINTING WITH ALUMINUM—1955, 8½ x 11, 32 pages.

27. COMFORT EVERYBODY CAN AFFORD—1956, 8½ x 11. Details on the use of aluminum-clad insulations.

See **Ceco Steel Products Corporation** under WINDOWS.

Kawneer Company

420. KAWNEER SUN CONTROL PRODUCTS. Illustrated booklet showing details and specifications. Photographs illustrate actual applications of the Kawneer Aluminum Canopy, K-Louver and Walk-Way Cover. 1958 AIA File No. 35-P-2.

See **Overly Mfg. Co.** under ROOFING.

Winco Ventilator Co.

744. RESIDENTIAL AND COMMERCIAL WINDOWS, PROJECTED FOR COMMERCIAL AND MONUMENTAL BUILDING. 8½ x 11. 24 pages.

ANCHORS AND TIES

National Lumber Dealers Assn.

105. TRIP-L-GRIP FRAMING ANCHORS. Installation and load data. 1955. 8 pages.

Richmond Screw Anchor Co.

608. HANDBOOK OF ENGINEERED TYING DEVICES, ANCHORAGES AND ACCESSORIES FOR CONCRETE CONSTRUCTION. Product data and details of use for all products plus engineering data on form design. 8½ x 11. 48 pages. AIA No. 4-D-3.

609. RICHMOND SNAP-TY FORM BOOK. Construction details and applications of Modular Form Panels for foundation wall construction. 8½ x 11. 16 pages. 1956. AIA No. 4-D-1.

BACKWATER VALVES

Josam Mfg. Co.

400. BACKWATER VALVES. Sewer and terminal valves to guard against backwater; product illustrations, installation diagrams, and operational details. 1956. 8½ x 11. 8 pages. AIA No. 29-C-7.

BAND SHELL

See **Overly Mfg. Co.** under ROOFING.

BATHROOM ACCESSORIES

W. P. Fuller & Co.

78. TRIMVIEW ALUMINUM SHOWER DOORS, TUB ENCLOSURES, SHOWER STALLS. Illustrates and describes several models of each type. Gives complete specifications. 8½ x 11. 4 pages. AIA No. 29H.

BLACKBOARDS

United States Plywood Corp.

684. WELDWOOD CHALKBOARD. Complete information on Weldwood Chalkboard in school and commercial installations. 1957. 8½ x 11. 8 pages. Form #1762.

685. WELDWOOD FOR SCHOOL CONSTRUCTION AND REMODELING. Description of Chalkboard and other Weldwood products for schools. 8½ x 11. 20 pages. Form #1621.

BOILERS

Crane Co.

264. CRANE SUNNYDAY 15 BOILER—AD2191—Features, dimensions and specifications for the residential boiler that saves up to 15 cents of every fuel dollar. Oil or gas fired. Sections are guaranteed against failure for 20 years. 6 pages. AIA FILE No. 30-C-1.

265. CRANE SUNNYDAY SENIOR 16 BOILER—AD2115—Specifications, features and dimensions for this residential hydronic boiler designed for oil exclusively. Sections of hot water models are guaranteed for 20 years. 6 pages. AIA FILE No. 30-C-1.

266. CRANE SUNNYDAY 20 BOILER—AD2116—Dimensions, specifications and features of the residential boiler designed for efficient operation with all fuels. Sections of hot water models carry 20 year guarantee. 6 pages. AIA FILE No. 30-C-1.

267. CRANE SUNNYDAY 2WG BOILER—Form B-1793—Specifications, features and dimensions for the residential boiler engineered for safe, clean, automatic gas heating. Sections carry 20 year guarantee. 4 pages. AIA FILE No. 30-C-1.

268. CRANE SUNNYDAY 26 BOILER—Form B-1762—Features, specifications and dimensions for a gas-fired residential boiler available in 8 sizes. 20 year guarantee on sections of hot water models. 4 pages. AIA FILE No. 30-C-1.

269. CRANE SUNNYDAY 30 BOILER—AD2216—Features, specifications and dimensions for the boiler designed for steam or hot water heating of large homes or small commercial buildings. 6 pages. AIA FILE No. 30-C-1.

270. CRANE SUNNYDAY 40 BOILER—Form B-1763—Specifications, dimensions and features for a gas-fired boiler suitable for steam or water heating of large homes or commercial use. 4 pages. AIA FILE No. 30-C-1.

271. CRANE SUNNYDAY 60 BOILER—Form B-1764—Dimensions, specifications and features for heavy-duty, steam or hot water commercial heating, gas fired. 4 pages. AIA FILE No. 30-C-1.

272. CRANE 41—ALL FUEL BOILER—AD 2284. For commercial, industrial, and institutional installations. Available in wide range of sizes and adaptable to any fuel. AIA FILE No. 30-C-1.

BULLETIN BOARD (TACKBOARD), WALL COVERING

Dodge Cork Co.

306. DODGE CORK COMPANY BROCHURE (AIA File #35-N-3). Contains samples of two textures and four colors of

cork tackboard, with listing of four additional colors available. Complete installation specifications.

CAULKING COMPOUNDS

Dicks-Armstrong-Pontius, Inc.

298. CATALOG PAGES: Description of DAP Caulking products of all types and colors. 8½ x 11. 2 pages.

299. DATA SHEETS: Describe new DAP Flexiseal liquid polymers with balanced modulus and Thiokol base. 8½ x 11. 7 pages.

National Paint, Varnish & Lacquer Assn.

548. CIRCULAR 770—Caulking Compound Manual.

CEILINGS, SUSPENDED SYSTEMS

See **Ceco Steel Products Corporation** under LATH.

International Nickel Company, Inc.

381. MONEL TIE-WIRE—Describes Monel tie-wire's advantages and characteristics, and gives suggested outline specifications for some common uses of the tie wire. 1954. 8½ x 11. 8 pages. AIA File No. 20-B-11. Lists sources of supply.

See **Ramset Fastening System** under FASTENINGS.

See **Vermiculite Institute** under VERMICULITE PRODUCTS.

CEMENTS

Medusa Portland Cement Company

Publishes individual catalogs on each one of their portland cements with descriptions, uses, features, specifications, mixing and proportioning data. Illustrated with photographs. All are 8½ x 11 size. AIA coded. Following are current catalogs available:

486. WHITE PORTLAND CEMENT. 1956. AIA No. 3-2-A. 4 pages.

487. WATERPROOFINGS. (Mill mixed Waterproofed Gray and White Portland cements, also WATERPROOFING PASTE AND POWDER for adding to any regular portland cement.) 1956. AIA No. 3-A-10. 8 pages.

488. GRAY MORTAR CEMENT (Brikset). 1955. AIA No. 3-A-9. 8 pages.

489. WHITE MORTAR CEMENT (Stoneset). 1955. AIA No. 3-A-9. 8 pages.

490. HIGH EARLY STRENGTH CEMENT. 1954. AIA No. 3-A-3. 4 pages.

491. TILE GROUT CEMENT (for grouting ceramic tile). 1954. AIA No. 23-Q. 4 pages.

492. DRY WALL TILE GROUT CEMENT (for grouting ceramic tile with drywall construction). 1958. AIA No. 23-Q. 4 pages.

Universal Atlas Cement Company

708. FOR FINE TERRAZZO—ATLAS WHITE CEMENT. 4-color brochure containing 22 true-color reproductions of terrazzo specimens. Also complete specifications and installation details. 1958. 8½ x 11. 8 pages.

709. ATLAS WHITE CEMENT FOR FACINGS, PAINT & STUCCO. Folder describing architectural concrete facings, portland cement paint and cement stucco. A reprint from Sweets' Catalog Files. 1958. 8½ x 11. 4 pages.

710. ATLAS WHITE CEMENT CATALOG. Contains general information on white portland cements (regular, air-entraining and waterproof) for use in terrazzo, concrete facings, stucco, paint and highway curbing. 1958. 8½ x 11.

711. BUILD BETTER MASONRY WITH ATLAS MORTAR CEMENT. Catalog outlining the composition, advantages and properties of masonry cement. Also includes recommended practices covering materials, proportioning, mixing, workmanship. Plus handy reference tables. 1958. 8½ x 11. 24 pages.

712. THEY'RE TALKING ABOUT UNIVERSAL PORTLAND SLAG CEMENTS. Brochure describing advantages and properties of portland blast-furnace slag cement (regular and air-entraining) for structural concrete, paving and the manufacture of concrete products. Contains endorsements by users and illustrations. 1958. 8½ x 11. 12 pages.

CERAMIC VENEER

Kraftile Company

102. KRAFTILE VENEER—New thin ceramic veneer for interior and exterior facing, 12" x 16" face size in ceramic colors. Light weight terra cotta, only ⅜" thick. Details of shapes and specifications. AIA No. 9-A. New 1956 folder.

CERAMIC VENEER—TERRA COTTA

Architectural Terra Cotta Institute

211. CV PANELWALL—THE PREFABRICATED CERAMIC VENEER CURTAINWALL. Technical information on design, fabrication, installation and performance of new, research-developed, prefabricated curtainwall of ceramic veneer. Complete construction details. 1956. AIA No. 9-A.

212. CERAMIC VENEER—THE MODERN ARCHITECTURAL TERRA COTTA—CATALOG 58-S. Details of both adhesion and anchor type ceramic veneer, plus specifications and setting techniques for anchored type. 1957.

213. INSTALLATION OF ARCHITECTURAL TERRA COTTA AND CERAMIC VENEER. Step-by-step recommendations for the application of both adhesion and anchored types of ceramic veneer. 1952.

214. ADHESION TYPE CERAMIC VENEER. Installation of adhesion type ceramic veneer discussed, tables, photos and construction details. 1953.

215. RECOMMENDED BACKING FOR ARCHITECTURAL TERRA COTTA AND CERAMIC VENEER. Discusses materials and methods for recommended backing for terra cotta and ceramic veneer in both interior and exterior construction with photos, and details. 1954.

216. REMODELING WITH CERAMIC VENEER. Discusses preparation of the building and application of adhesion type and anchored type ceramic veneer. 1955.

CHAIR CARRIERS & CLOSET FITTINGS FOR WALL-HUNG FIXTURES

Josam Mfg. Co.

401. CATALOG F. 32 pages covering illustrations, specifications and recommendations for Closet Carriers and Closet Fittings and Carriers for Urinals, Lavatories, Sinks, Hospital Fixtures and other Wall-hung Fixtures. 8½ x 11. 1958. AIA No. 29-H-8.

402. MANUAL FD. Selection Chart for Carriers for Wall-hung Fixtures, giving fixture manufacturers name and Catalog Number and recommended Josam Unitron Carrier. 16 pages. 1958. AIA No. 29-H-8.

CLAY FACING TILE

Natco Corporation

535. NATCO MODULAR CERAMIC GLAZE VITRITILE, 8W SERIES— Shape Catalog, 8W-257. Nominal face size 8" x 16". Tile thicknesess, face dimensions and coursing tables. 1957. 8½ x 11. 4 pages. AIA File No. 10-B.

536. NATCO MODULAR CERAMIC GLAZE VITRITILE, 6T SERIES—Shape Catalog, 6T-1155. Nominal face size, 5⅓" x 12". Tile thicknesses face dimensions, coursing tables and estimating data. 1955. 8½ x 11. 8 pages. AIA File No. 10-B.

537. NATCO MODULAR CERAMIC GLAZE VITRITILE, 4D SERIES—Shape Catalog, 4D-1255. Nominal face size, 5⅓" x 8". Tile thicknesses, face dimensions, coursing tables and estimating data. 1955. 8½ x 11. 8 pages. AIA File No. 10-B.

538. NATCO FACING TILE CONSTRUCTION DETAILS, 6T SERIES—Catalog 51-CD. Wall sections, isometric details and estimating data for NATCO VITRITILE, nominal face size 5⅓" x 12". 1951. 8½ x 11. 8 pages. AIA File No. 10-B.

539. NATCO MODULAR DRI-SPEEDWALL TILE—Bulletin DRI-18B. Technical data on Buff Unglazed and Manganese Spot facing tile for interior and exterior walls. 1956. 8½ x 11. 4 pages. AIA File No. 10-B.

540. NATCO CERAMIC GLAZE VITRITILE COLOR STANDARDS—Bulletin CC-57. Colors and finishes of structural facing tile. 1957. 8½ x 11. Single sheet. AIA File No. 10-B.

541. NATCO UNIWALL FACING TILE—Bulletin UW-100-2. Shape details and specifications for single unit wall construction, finished inside and out. 1956. 8½ x 11. Single sheet.

542. NATCO TEX DRI-WALL TILE—Bulletin TEX DW-1. Product information and construction details. 8½ x 11. Single sheet.

543. NATCO PATIO TILE—Catalog SB-57, and single detail sheet. Descriptive data and shapes. 1957. 8½ x 11. 4 pages and insert. AIA File No. 10-A.

CLEANOUT PLUGS AND COVERS

Josam Mfg. Co.

403. SUPERSEAL CLEANOUTS and Access Covers. Catalog CL. Giving selections for the proper cleanout or cover for every requirement, including specifications, illustrations, dimensions, materials of cleanouts, with and without access covers, covers and frames, cleanout tees, adjustable floor level cleanouts, installation diagrams, code requirements, selection charts for floor and wall type cleanouts and covers and for heavy duty industrial requirements. 8½ x 11. 18 pages. 1956. AIA No. 29-C-31.

J. A. Zurn Mfg. Div.

761. SUPREMO CLEANOUTS. Manual No. 54-4. Includes complete sizes, dimensions, materials and recommended specifications, and a complete selection of Supremo perfect seal cleanouts and access covers; includes cleanouts, with access covers and frame, cleanout tees and adjustable floor level cleanouts, access covers and frames, for walls and floors and heavy duty areas, and access boxes and access plugs. 32 pages, 8½ x 11. AIA No. 29-C-31 (NN).

CLOSERS, DOOR

LCN Closers, Inc.

437. CATALOG NO. 15—COMPLETE LINE OF LCN PRODUCTS. Includes details and dimensions for drafting room and specification references. Issued 1957. 8½ x 11. 44 pages.

439. BROCHURE—LCN EXPOSED DOOR CLOSERS. Full catalog treatment of the exposed closers only, with brackets and accessories. Issued 1957. 8½ x 11. 12 pages.

438. BROCHURE—LCN CONCEALED-IN-DOOR CLOSERS. Descriptive details, dimensions, installation diagrams and tables for four forms of these closers. Issued 1958. 8½ x 11. 8 pages.

440. BROCHURE—LCN OVERHEAD CONCEALED CLOSERS. Full catalog treatment of the 3 overhead concealed closers with disappearing arm. Issued 1958. 8½ x 11. 8 pages.

441. FOLDER—LCN "SMOOTHEE" DOOR CLOSER. Full descriptive and dimensional data, sizes, etc. for the new surface-applied closer of pleasing appearance. Issued 1957. 8½ x 11. 4 pages.

COLOR

The Master Builders Company

476. COLORCRON. A ready-to-use product for achieving color beauty in concrete floors and walks. Pennies per square foot provides lasting "built-in" color for residential, commercial and institutional buildings. 3½ x 6. 6 pages. Colorcron 9.

COLOR—ALUMINUM

See **Overly Mfg. Co.** under ROOFING.

COMMUNICATION SYSTEMS

See **Minneapolis-Honeywell** under ELECTRIC CONTROL SYSTEMS.

CONCRETE

The Master Builders Company

477. GENERAL CATALOG. Description of the principal products manufactured by the Master Builders Company for the improvement of concrete and mortar. Discussion covers the use of these materials in various phases of the building industry and stresses the importance of the unique Master Builders research and field organizations in securing success on any job. 8½ x 11. 16 pages.

478. DESIGN AND SPECIFICATION OF WATERTIGHT CONCRETE. A factual summary of the problems involved in the production of watertight concrete. Discussion covers: permeability, shrinkage, bleeding, segregation, and the action of Pozzolith to minimize these defects by permitting the lowest possible unit water content consistent with proper placement. 8½ x 11. 6 pages.

See **Vermiculite Institute** under VERMICULITE PRODUCTS.

Zonolite Co.

751. ZONATILE SHORT SPAN CONCRETE ROOF TILE. Insulating precast roof tile. "U" values, usage, specifications, diagrams. ZT-2. 1955. AIA No. 10-C, 37-B-2. 4 pages. 8½ x 11.

752. ZONOLITE CONCRETE FOR BERMUDA ROOFS. Photos, general information on Zonolite Concrete for modern, insulated Bermuda Roofs. CA-21. 1955. AIA No. 37-B-2. 4 pages. 8½ x 11.

753. ZONOLITE SYSTEMS OF ROOF AND FLOOR CONSTRUCTION. General information, physical data and specifications and design data on roof systems. CA-43. 1957. AIA No. 4-E-13, 37-B-2. 8 pages. 8½ x 11.

CONCRETE FORMS

See **Ceco Steel Products Corporation** under ROOF CONSTRUCTION SYSTEMS.

United States Plywood Corp.

686. WELDWOOD PLYSCORD AND PLYFORM WITH L-1R GLUE. 4 pages. 8½ x 11. Form # 153B.

CONCRETE INSERTS

See **Ramset Fastening System** under FASTENINGS.

Truscon Steel Division

658. PRESSED STEEL INSERTS—for attaching shafting, hangers, sprinkler and heating systems, etc., to concrete. 8 pages. 8½ x 11.

COPING

See **Overly Mfg. Co.** under ROOFING.

COVE BASE

B. F. Goodrich Company

340. RUBBER COVE BASE LEAFLET—Color plates, description, features and specifications for B. F. Goodrich Molded Rubber Cove Base and Accessories.

CURTAIN WALLS

See **Ceco Steel Products Corporation** under WINDOWS.

See **Davidson Enamel** under PANELS, PORCELAIN.

The Dow Chemical Company

311. STYROFOAM HD-1 and STYROFOAM HD-2. High density polystyrene foams and properties and applications.

Flour City Ornamental Iron Co.

331. FLOUR CITY CURTAIN WALLS. Details of curtain walls in aluminum and stainless steel; designs for pressed panels; reversible windows in curtain walls; important points in fabrication and erection. 1958. 8½ x 11. 16 pages. AIA No. 17-A.

Michael Flynn Mfg. Co.

334. LUPTON ALUMINUM CURTAIN WALLS—Catalog and Detail Sheets 1958 edition AIA File 16E. Details and Specifications on Type H and Type G Curtain Walls.

Kawneer Company

421. CUSTOM METAL WALL. Fully illustrated booklet describing the Kawneer Custom Metal Wall System. Details show actual design applications. 1958. AIA File No. 17-A.

422. UNIT WALL—A detailed booklet illustrating the features, design choices and outstanding applications of Kawneer Unit Wall. Full product specifications are also listed. 1958. AIA File No. 17-A.

Libbey-Owens-Ford Glass Co.

442. BLUE RIDGE HUETEX SPANDREL GLASS. Four-page bulletin with technical folder giving information on color, insulating value, and make up of 5/16" tempered glass with atomized aluminum back for curtain walls. 8½ x 11. AIA File No. 26-A.

443. VITROLUX CURTAIN WALL GLASS. Illustrates L.O.F.'s curtain wall material of color fused heat-strengthened plate glass. 1957. 8½ x 11. 4 pages.

Ludman Corporation

456. CURTAIN WALL CATALOG. Describes and illustrates standard aluminum curtain wall systems with section details, elevations and specifications showing curtain wall, window inserts, panel inserts, and mullions. 1958. 8½ x 11. 12 pages.

Mo-Sai Associates

781. MO-SAI . . . THE FACING WITH A FUTURE. Information on Mo-Sai used as a curtain wall unit, with or without built-in insulation. Other design and construction details, and information on Mo-Sai handling methods. 16 pages. 2 colors. 8½ x 11. 1958.

See **Overly Mfg. Co.** under ROOFING.

See **Ramset Fastening System** under FASTENINGS.

Truscon Steel Division

659. TYPICAL DETAILS OF CURTAIN WALLS FOR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL BUILDINGS. 20 pages. 8½ x 11.

See **United States Ceramic Tile Co.** under TILE.

United States Plywood Corp.

687. DESIGN MANUAL ON WELDWOOD CURTAIN WALL PANEL. Description and instruction details. 32 pages. 8½ x 11. Form #1720.

See **Vermiculite Institute** under VERMICULITE PRODUCTS.

DOOR CONTROLS

Schlage Lock Co.

160. BOOKLET NO. 680—"DOOR CLOSER CATALOG". A description of the new Schlage door closer emphasizing its complete reversibility and ease of installation.

DOORS

Ceco Steel Products Corporation

241. CECO HOLLOW-METAL DOORS, BULLETIN No. 1040-F. Full data on hollow-metal doors . . . frames, borrowed lights and hardware . . . types and sizes. 1958. 8½ x 11. 28 pages. AIA No. 16-A.

Flour City Ornamental Iron Co.

332. FLOUR CITY METAL DOORS. Complete details of Flour City's new balanced door in various metals. Details of aluminum swing doors showing standard stile sections. Photos of special ornamental bronze doors. 8½ x 11. 12 pages. AIA No. 16-E. 1958.

W. P. Fuller & Co.

79. TRIMVIEW ALUMINUM SLIDING GLASS DOORS FOR SINGLE OR DOUBLE GLAZING. Complete instruction and installation details. Complete specifications. Includes multiple track models and wall pocketing models. 8½ x 11. Eight pages.

Holcomb & Hoke Mfg. Co., Inc.

91. FOLDOOR ARCHITECTURAL CATALOG. Data and drawings, examples of installations and the specifications of MULTI-V and MULTI-X FOLDOORS. Includes types of installations, fabric specifications, sizes, typical architectural details. 8½ x 11. 16 pages.

92. FOLDOOR CHURCH FOLDER . . . No. 5459. Photographs showing the applications of FOLDOOR in churches. 5½ x 8½ folder.

93. FOLDOOR SCHOOL FOLDER No. 7202. Photographs showing the applications of FOLDOOR in schools. 3¾ x 8½ folder.

94. FOLDOOR FUNERAL HOME FOLDER No. 5261. Photographs showing the applications of FOLDOOR in the Funeral Home. 5½ x 8½ folder.

95. FOLDOOR COMMERCIAL FOLDER No. 5491. Photographs to show FOLDOOR applications in hotels, clubs, institutions and commercial buildings. 5½ x 8½ folder.

96. FOLDOOR BEAUTYLINE CATALOG SHEET No. 5380. Information on residential folding doors.

97. FOLDOORS FOR YOUR HOME FOLDER No. 5522. Illustrations of a variety of domestic applications for FOLDOOR as folding doors and folding room-dividers. 3⅞ x 7¼ folder.

Inland Steel Products

373. MILCOR HOLLOW METAL DOORS CATALOG NO. 280. Milcor's new line of Hollow Metal Doors offers maximum security and durability to withstand the hard usage encountered in commercial, industrial and institutional buildings. The doors are available in a variety of attractive designs and standard sizes. They are fabricated from heavy gauge, hollow steel sections, Bonderized and painted with a chip-resistant baked-on prime coat. Matching frames and hardware are also offered.

Libbey-Owens-Ford Glass Co.

444. TUF-FLEX GLASS DOORS. Technical data on Tuf-flex glass doors, including installation details and sizes. 1957. 8½ x 11. 12 pages. AIA File No. 17-A.

445. BLUE RIDGE SECURIT INTERIOR GLASS DOORS. Four-page folder of information and details on a door of patterned glass giving size, hardware finish, and photos of installations. 8½ x 11. AIA File No. 16-N.

446. SLIDING GLASS DOORS. Illustrates Parallel-O-Plate and Thermopane sliding doors in homes, schools and commercial buildings. 1957. 12 x 9. 2-color.

Ludman Corporation

457. SLIDING GLASS DOOR CATALOG. Describes and illustrates aluminum-framed sliding glass door with features, sizes, details, and specifications. 1958. 8½ 11. 4 pages.

New Castle Products, Inc.

134. MODERNFOLD ARCHITECTURAL CATALOG, No. 1043. Complete data—including specifications and installations details—on MODERNFOLD Doors. Special illustrated page devoted to new locking and latching hardware. 8½ x 11. 16 pages. AIA No. 16M. 1957.

135. MODERNFOLD "WORKING WITH SPACE." Periodical idea publication edited for Architects and Contractors. Contains interesting and useful information on various applications of MODERNFOLD Doors in all types of construction.

Overly, Mfg. Co.

566. OVERLY FIRE DOORATER (FOURTH EDITION REVISED). Recognized as the most complete condensation of Underwriters' Laboratories rating data ever produced. Contains new U. L. techniques of labeling, effective 1/1/57. Includes data on transmitted temperature ratings; how to determine hand of doors; hardware location dimensions. 4 pages. 8½ x 11. AIA Nos. 16-A & 16-B. 1957 (Fourth) Edition.

567. OVERLY DOOR & FRAME CATALOG. Design details and streamlined specifications on Overly pressed steel door frames, Overline labeled and non-labeled steel and stainless steel hollow metal doors, and on tinclad and Kalamein fire doors. Comes complete with engineering details and directory of Overly representatives. 20 pages. 8½ x 11. AIA Nos. 16-A & 16-B. 1958 Edition.

568. OVERLINE FLUSH HOLLOW METAL FIRE DOOR TECHNICAL DATA SHEET. Contains data on revolutionary new Overline fire doors—first in the hollow metal industry to gain full Underwriters' Laboratories 3 HR. (A) label approval without elaborate and costly hardware. Explains the 50% cost reduction occasioned by this new development which features a simple ¾" lockset (mortise or cylindrical) and flush bolts with standard weight hinges. 2 pages. 8½ x 11. 1958.

See **Overly Mfg. Co.** under ENTRANCES.

The Peelle Company

580. PEELLE INDUSTRIAL ENTRANCE DOOR CATALOG. This catalog covers the various kinds of special engineered doors available from the Peelle Company. The purpose of this catalog is to invite planners to consult with Peelle prior to specifying, in connection with very special door problems. Included are motorized walls, to provide separations in college field houses, churches and schools, etc. 1956. 8½ x 11. 4 pages. AIA No. 16-D.

581. PEELLE FREIGHT ELEVATOR DOOR CATALOG. This catalog covers both Peelle Freight elevator doors, manually operated and motorized, and Peelle freight elevator car gates: also Peelle prefabricated dumbwaiter doors and pass windows for dining rooms, cafeterias, etc. This catalog is designed as a reference manual, which not only illustrates the product, but shows the space requirements and outlines specifications in complete detail. 1956. 8½ x 11. 12 pages. AIA No. C-5.

Roddis Plywood Corp.

610. FLUSH DOORS BY RODDIS—Description, illustrations and specifications covering Roddis solid core doors, hollow core, x-ray proof and Underwriters B Lable Fire Doors. Diagrams showing light and louvre opening details and glazing specifications. 8½ x 11. 12 pages. AIA No. 19-E-1.

Rolscreen Co.

618. PELLA WOOD FOLDING DOORS, SWEET'S REPRINT. General information; description; specifications; dimensions for detailing. 1958. 8½ x 11. 8 pages.

Sedgwick Machine Works, Inc.

630. SEDGWICK DUMB WAITER DOORS (No. 1044R). 1951. 8½ x 11. 4 pages.

Stanley Works

647. STANLEY DOOR CONTROLS—M-14 and S-7. Installation details and uses of Stanley Magic Doors (Photoelectric and magic carpet)—service, entrance, industrial, etc. For new and existing doors. 1957. 8½ x 11. 16 pages. AIA No. 16-D.

Truscon Steel Division

660. STEEL DOORS FOR INDUSTRIAL BUILDINGS AND HANGERS. Complete details and specifications. 44 pages. 8½ x 11.

661. INTERIOR STEEL DOORS FOR RESIDENTIAL AND OTHER LIGHT OCCUPANCY BUILDINGS. Swing and sliding closet types. 12 pages. 8½ x 11.

662. TRUSCON 1¾-inch HOLLOW METAL DOORS. Description, installation details and specifications. 16 pages. 8½ x 11.

United States Plywood Corp.

688. WELDWOOD DOORS. Describes complete line of Weldwood doors. 8½ x 11. 8 pages. Form #1765.

J. A. Zurn Mfg. Co.

762. INSPECDOR. Drawings, dimensions, specification information on access doors for concealing controls and fittings. 1 page, color, 8½ x 11. AIA File No. 16-I.

DOOR FRAMES

See **Overly Mfg. Co.** under DOORS.

DOORS—LABELED

See **Overly Mfg. Co.** under DOORS.

DOORS—SLIDING

Arcadia Metal Products

209. ARCADIA STEEL AND ALUMINUM FRAMED SLIDING GLASS DOORS: Installation details, listing of stock sizes, heavy duty sizes, doors for single and double glazing special models and door features. Four color catalog shows photographs of installations and illustrates installation details. 36 pages. 8½ x 11. AIA No. 16-E. Sweet's File. Feb. '58.

DRAINS

Josam Mfg. Company

404. CATALOG K. Revised. Plumbing drainage products. Illustrations, specifications, detailed drawings and installation diagrams. 1956. 8½ x 11. 208 pages. AIA No. 29-C.

405. FOLDER LVS. "Leveleze" heavy duty floor and roof drains with adjustable top. Illustrations and specifications showing how adjustable top solves problems caused by variations in floor or roof levels. 1956. 6 pages. 8½ x 11. 29-C-3.

406. CATALOG MP-2. Illustrations and descriptions of marine drainage products for shipbuilding. 1951. 8½ x 11. 8 pages. 29-G.

407. FOLDER RK. 6 pages covering illustrations, specifications and dimensions on Roof Drainage Products for every type of roof construction. AIA No. 29-C-3. 1956.

408. FOLDER SF. "Super-Flo" floor drains, the latest development in floor drains giving greater flow rate (GPM), greater sanitation, greater interchangeability. Illustrations, specifications, dimensions, flow rate charts. 8 pages. 8½ x 11. 1956. AIA No. 29-C-3.

409. MANUAL SK. 196 pages of specifications and roughing in dimensions on drains for every requirement, as a reference guide for field or office use. 5¼ x 6¾. AIA No. 29-C.

J. A. Zurn Mfg. Div.

763. ROOF DRAIN. Manual No. 54-1. Contains complete product information including sizes, dimensions, material and recommended specifications on all types of roof drains, includes general purpose drains, roof or promenade, deck drains, air-relieved cloudburst and steel deck roof drains, heated roof drains, roof traffic deck drains, balcony, cornice, marquee and sill drains, scupper roof drains, expansion joints, parapet sleeves, and vent stack flashing sleeves. 48 pages. 8½ x 11. AIA No. 29-C-3.

764. PLUMBING DRAINAGE CONTROL. Manual No. 54-2. Includes complete catalog information including sizes, dimensions, recommended specifications on an entire line of floor and area drains; includes universal drains with adjustable strainers, heavy duty drains with and without sediment buckets, gutter and trench drains, special purpose drains, backwater valves, traps and trap primers, adaptors and accessories, and acid resisting equipment. 104 pages. 8½ x 11. AIA File No. 29-C-3.

765. SWIMMING POOL MANUAL. 54-6. Presents the latest ideas on water circulation, in the design of swimming pools. Includes dimensional drawings. Revised 1955. 8½ x 11.

766. AUTOMATIC TRAP PRIMER. Form No. 49-7. Full details on the importance of this little thought about problem. 1953. 4 pages. 8½ x 11.

767. DRAINDICATOR. A circular scale developed by Zurn Engineers to facilitate drain sizing and specification. 9½ dia.

DUMBWAITERS

Otis Elevator

136. A-411 OTIS ELECTRIC DUMBWAITERS. Describes uses and features of the line of Otis dumbwaiters for high and low rises. Also gives layout and installation data. 1956. 8½ x 11. 8 pages. AIA File No. 33-G.

Sedgwick Machine Works, Inc.

631. SEDGWICK Electric Roto-Waiter (No. 1037R). 1954. 8½ x 11. 4 pages.

632. SEDGWICK CORRESPONDENCE LIFT (No. 196R). 1952. 8½ x 11. 4 pages.

633. SEDGWICK ELECTRIC CORRESPONDENCE AND PARCEL LIFT (No. 1069). 1951. 8½ x 11. 4 pages.

634. ELECTRIC TRACTION DUMBWAITER (No. 1076). 1955. 8½ x 11. 4 pages.

635. GENERAL CATALOG. 1958. 8½ x 11. 8 pages.

ELECTRIC CONTROL SYSTEMS

Minneapolis-Honeywell Regulator Co.

504. HONEYWELL COMMUNICATION/CONTROL MASTER TM SYSTEMS (76-3804). Discusses the cybernetics of building-design and illustrates the application in two MASTER TM systems: one for hotels/motels and another for surgery and delivery rooms in hospitals. Briefly outlines Honeywell's unique position in the execution of such cybernetic systems as designed by leading architects. 1957-8, 8½ x 11, 2-color, 4 pages.

505. HONEYWELL HOTEL/MOTEL MASTER (76-3362). Introduces new centralized systems for integrated control of any of 14 innkeeping services. For new or modernized hotels and motels. 1958, 8½ x 11, 3-color, 6 pages.

506. WHEN/HOW DOES THE ARCHITECT USE RESIDENTIAL ZONE CONTROL (76-2743). Emphasizes specifications and explains conditions that make zone control necessary. Discusses how to plan zones, shows dampers, valves and thermostats. 1957, 8½ x 11, 2-color, 4 pages.

507. INDOOR-OUTDOOR RESIDENTIAL CONTROL SYSTEM (76-3892). Gives semi-technical installation and performance description of Honeywell's new, popularly-priced, weather-compensated heating control system. 1958, 8½ x 11, 2-color, 4 pages.

508. COMPLETE RESIDENTIAL HEATING-COOLING CONTROL SYSTEMS (76-3325). Emphasizes the complete line of controls available to assure dependable residential air conditioning. 1957, 8½ x 11, 2-color, 4 pages.

ELECTRIC PRODUCTS

Frank Adam Electric Co.

3. SERVICE EQUIPMENT. Descriptions, Catalog numbers, sizes, capacity, and suggested specifications on Service Entrance Equipment.

4. LOAD CENTERS. Circuit Breaker Type Load Centers and Service Equipment ranging from 1 to 20 branches available from 15 to 50 ampere branch circuits single or double pole.

5. LIGHTING PANELBOARDS. Dimensions, capacities, and catalog numbers of various Circuit Breaker, Switch and Fuse, and Fuse Only type of Panelboards with specifications.

6. DUST TIGHT PANELBOARDS. Description of and suggested application of "DUSTITE" circuit breaker panelboards.

7. DISTRIBUTION PANELBOARDS. Data on 250 and 600 volt service Standard Feeder Distribution Panelboards. Switch and fuse or circuit breaker types.

8. ENCLOSED SAFETY SWITCHES. Capacities, dimensions, weights, catalog numbers and technical descriptions on SHUTLBRAK type SAHD—Heavy Duty & Type SCSD—Standard Duty Enclosed Switches, both indoor and rain tight.

9. BUSDUCT. Dimensions and typical installations of 250 to 1500 ampere Feeder and Plug-in Busduct and 600 to 4000 ampere High Frequency Type Feeder Busduct.

10. WIRE AND CABLE DUCT. Listing and description of sections used in installing wire or cable duct in 2½" x 2½", 4" x 4" or 6" x 6" sizes.

11. MIDGET SIZE PLUG-IN BUSDUCT. Data on 5' or 10' sections of Midget size. 100 ampere capacity Plug-in Busduct with 30 ampere fused plug-ins, 2 pole, 3 pole, or 3 phase 4 wire.

12. FLOOR BOXES. Descriptions and Data on Floor Boxes, Fan Hangers and Clock Hangers.

13. STAGE AND AUDITORIUM LIGHTING CONTROL. Descriptions and illustrations on switchboards for control of stage and auditorium lighting in schools, theaters and auditoriums.

ELEVATORS

Otis Elevator

137. A-382—VERTICAL TRANSPORTATION BY OTIS. A catalog describing and illustrating details of passenger and freight elevators, escalators, electric dumbwaiters and modernization and maintenance. 1958. 8½ x 11. 28 pages. AIA No. 33-G.

138. A-413—OTIS AUTOTRONIC WITHOUT ATTENDANT ELEVATORS. A booklet describing and illustrating the advantages and operation of completely automatic elevators for new and modernized busy buildings. 1956. 8½ x 11. 24 pages.

139. A-381—THE MODERN HOSPITAL AND ITS ELEVATOR NEEDS. Relates the effects of hospital layout and practices to the hospital vertical transportation system and gives factual information on elevators and elevator systems to meet the requirements of hospital elevatoring. 1956. 8½ x 11. 24 pages.

140. A-414—THE NEW OTIS PLUNGER ELECTRIC FREIGHT ELEVATOR. Describes a hydraulically operated elevator for low-rise, light and heavy duty freight handling requirements. 1955. 8½ x 11. 12 pages. AIA No. 33-C.

141. B-705—POW-R-TRUCK ELEVATORS. Gives reasons for using Pow-R-Truck Elevators, features of Otis Pow-R-Truck Elevators, also commonly specified sizes and capacities. 1956. 8½ x 11. 8 pages. AIA No. 33-E-1.

142. B-720—LIGHT DUTY ELECTRIC FREIGHT ELEVATORS. Describes a freight elevator with capacities up to 2500 pounds. Gives car and hoistway dimensions and details on simplicity of installation. 1953. 8½ x 11. 8 pages. AIA No. 33-C-4.

Sedgwick Machine Works, Inc.

636. SEDGWICK Stair-Travelor (No. 1065). 1953. 8½ x 11. 4 pages.

637. SEDGWICK Lectro-Lift (No. 363R). 1954. 8½ x 11. 4 pages.

638. SEDGWICK Electric Sidewalk Elevator (No. 1042R). 1954. 8½ x 11. 4 pages.

639. GENERAL CATALOG. 1958. 8½ x 11. 8 pages.

640. SEDGWICK "Stair-Chair"® (No. 1080). 1956. 5½ x 8½. 8 pages.

ENTRANCES

American Art Metals Company

192. AMARLITE ALUMINUM ENTRANCES. New 24-page catalog with illustrations, details and specifications for Amarlite Standard Doors and Frames, Panel Doors, Wide Stile Doors, Panic Exit Doors, Custom Entrances, Supplemental Hardware, Stock Shapes. 1958. AIA File No. 16-E. (Also see Store Fronts).

Kawneer Company

423. KAWNEER ENTRANCES — 11-page booklet illustrating Kawneer's Narrow Stile Welded Door and complete line of interchangeable hardware, Kawneer's new Wide Stile Door, Flush Door and the new "Narrow Line" Muntin and Mullion Glazing System. 1958. AIA File No. 16-A.

Overly Mfg. Co.

569. OVERLINE ENTRANCES—STAINLESS STEEL & COLORCLAD STEEL. Illustrates typical Overline entrance installations in school, office, plant and hospital use. Provides complete listing of standard hardware sets. Includes entrance advantages, typical details and streamlined specs, plus data on Fing-R-Gard (safety door edge), and Tilt-A-Front (tilt-up wall construction). 12 pages. 8½ x 11. AIA No. 16-A. 1958 Edition.

EXHAUSTERS

Ammerman Co., Inc.

205. BULLETIN No. 100 — AIRXPELER POWER ROOF — GRAVITY SIPHON, FRESH AIR SUPPLY UNITS AND DRAFT INDUCER EXHAUSTER. Capacity tables, dimensions and installation illustrations. 1957. 8½ x 11. 12 pages.

EXPANSION JOINTS

Celotex Corporation

61. ARCHITECT SPEC. NO. 50, FLEXCELL BITUMINOUS FIBER EXPANSION JOINT FILLER. Product description, recommended uses, physical property data, specifications and details. 1955. 8½ x 11. 4 pages. AIA No. 4-E-11.

Dicks-Armstrong-Pontius, Inc.

302. Data Sheets—describe new DAP Flexiseal Non-sag and pourable liquid polymer joint sealant with Thiokol base. 8½ x 11. 7 pages.

See **The Dow Chemical Company** under FLASHING MATERIAL.

See **Overly Mfg. Co.** under ROOFING.

FACING

See **Davidson Enamel** under PANELS, PORCELAIN.

See **The Dow Chemical Company** under FLASHING MATERIAL.

Kawneer Company

424. KAWNEER WALL FACINGS. Booklet describing Kawneer Zourite, porcelain enameled facing material. Information on Color Wall porcelain facing panels also available. 1958. AIA File No. 15-M-1.

Mo-Sai Associates

782. MO-SAI PRECAST FACING. Information on physical characteristics, anchoring methods, special shapes, specifications. 8 pages, four colors, 8½ x 11. AIA No. 4-K-1. 1958 edition Sweet's insert.

783. MO-SAI DESIGN AND CONSTRUCTION HANDBOOK. Full-page design details on most-used methods. Convenient lay-flat binding for ready reference. 25 pages of design details, plus additional information on handling and finishing. AIA No. 4-K-1. 8½ x 11.

FASTENINGS

Ramset Fastening System

600. CATALOG. Full size photographs and specifications of Ramset tools, fasteners and related products. 8½ x 11. 8 pages. Form B-107. (1957)

601. ARCHITECTURAL HANDBOOK. For powder-driven fastening. This 48-page handbook has been prepared for the architect and engineer. It is intended to fill an ever increasing need for more complete information on the various applications, recommended conditions of use, and fastener working loads of powder-driven fasteners in the field of construction. Form B-124. (1958)

602. FASTENER SELECTOR GUIDE. Full size photographs of Ramset fasteners, powder charges and accessories. Shows exact Ramset tool, fastener (by number), charge and accessory to use for over 100 kinds of fastening into concrete, steel or wood. Form B-117. (1957)

FENCES

National Lumber Dealers Assn.

106. HOW TO BUILD WOOD FENCES. Guide to the design, selection and installation of wood fences. Actual photos of typical fence designs in use, descriptions of major wood fence types. Step-by-step construction details illustrated. 1956. 16 pages. 25¢.

FILTER BLOCKS

Natco Corp.

544. NATCO UNIFILTER BLOCK UNDERDRAINS FOR TRICKLING FILTER BEDS OF SEWAGE DISPOSAL PLANTS —Bulletin UF-3. Technical data, unit and construction details. 1951. 8½ x 11. 16 pages. AIA No. 29-C.

FINISHES—ALUMINUM

See **Overly Mfg. Co.** under ROOFING.

FIRE ALARM SYSTEMS

Minneapolis-Honeywell Regulator Co.

509. HONEYWELL FIRE DETECTION AND ALARM SYSTEMS (76-3876). Describes Honeywell's systems for commercial, industrial and institutional buildings and illustrates selected components. 1957, 8½ x 11, 2-color, 4 pages.

FIREPROOFING OF STRUCTURAL STEEL

See **Vermiculite Institute** under VERMICULITE PRODUCTS.

FLASHING

See **Overly Mfg. Co.** under ROOFING.

FLASHING MATERIAL

The Dow Chemical Company

312. SARALOY 400 ELASTIC FLASHING. Installation data and specifications for industrial and residential flashing applications. 153-83.

FLASHING TILE

Natco Corporation

545. NATCO RAGGLE BLOCKS AND FLASHING TILE. Technical data and use. 1953. Single sheet. AIA No. 10-B.

FLOOR CONSTRUCTION SYSTEMS

Ceco Steel Products Corporation

242. CECO PRODUCTS FOR REINFORCED CONCRETE CONSTRUCTION, BULLETIN No. 4002-B. Manual of concrete joist construction—flange type and adjustable type. Steelforms, longforms, waffle construction, underfloor electrification, reinforcing steel. Details, methods, standard practices. 1956. 8½ x 11. 54 pages. AIA No. 4-E-6.

243. CECO STEELDOMES, BULLETIN No. 4007. Construction details, features and design of Ceco Steeldomes for waffle-type concrete joist construction. Tables of sizes and concrete quantities. 8½ x 11. 16 pages. AIA No. 4-E-6.

244. CECO OPEN-WEB STEEL JOISTS AND ROOF DECK, BULLETIN No. 3001-N. Properties and dimensions of shortspan, longspan and electro-channel joists together with steel roof deck. Also includes specifications, accessories and recommended erection practices. 1958. 8½ x 11. 36 pages. AIA No. 13-G.

See **Ceco Steel Products Corporation** under ROOF CONSTRUCTION SYSTEMS.

Inland Steel Products

374. MILCOR CELLUFLOR CATALOG No. 270. The lightweight nature of Milcor Celluflor construction offers worthwhile construction economies through decreased structural steel and foundation requirements. Installation proceeds right along with the structural frame—regardless of weather—and immediately provides large expanses of storage and work areas for other trades. A detailed discussion of its design properties, installation, use and advantages is contained in this Catalog.

375. MILCOR RIBFORM CATALOG No. 245. This new rigid-type centering, Milcor Ribform, is a high strength steel base for short-span concrete floor and roof slabs. It is excellent for use over pipe trenches where it is impractical and expensive to remove wood forms. Complete description and load tables are included in this 4-page catalog.

National Lumber Dealers Assn.

107. PLANK AND BEAM FLOOR AND ROOF SYSTEM FOR RESIDENTIAL CONSTRUCTION. Illustrations and load tables. 1940. 16 pages.

Truscon Steel Division

663. TRUSCON CLERESPAN STEEL JOISTS. Description of product, dimensions, loading tables and specifications. 1956. 8½ x 11. 20 pages. AIA No. 13G.

664. TRUSCON "O T" OPEN TRUSS STEEL JOISTS. Complete description of steel joists specifications, loading tables and properties and dimensions. 1956. 8½ x 11. 36 pages. AIA No. 13G.

See **Vermiculite Institute** under VERMICULITE PRODUCTS.

Zonolite Co.

754. ZONOLITE FLOOR SLABS AND FLOOR FILL. Data, specifications, illustrations for lightweight insulating floor slabs-on-ground, fill over structural floors, or floor slabs over closely-spaced joists. CA-4. 1952. 12 pages. 8½ x 11.

FLOORING

Armstrong Cork Co.

219. SWEETS CATALOG INSERT. 1958 edition. Color plates showing full color line, description, technical data, and specifications of Armstrong's Linoleum, Carlon Plastic Floorings, Asphalt Tile, Linotile, Rubber Tile, Custom Corlon Tile, Cork Tile, Corkwall, Vinyl Wall Tile, plastic surfacing for walls and counters. Wall Covering, and Corlex Plastic Laminate Countertops. Size 8½ x 11. 32 pages.

220. ARMSTRONG RESILIENT FLOOR SPECIFICATIONS. Individual Unabridged Architect's Specifications for the specifying and installation of Armstrong's Linoleum, Corlon Plastic Sheet Flooring, Asphalt Tile, Rubber Tile, Linotile, Custom Corlon Tile, Cork Tile and Custom Vinyl Cork Tile. Latest editions. 8½ x 11. AIA File No. 23-G.

221. RESILIENT FLOORS: TECHNICAL INFORMATION FOR ARCHITECTS. Brief articles on technical factors involved in the specification, installation, and maintenance of all types of resilient flooring. 1958 edition. 54 pages. 8½ x 11. AIA File No. 23-G.

Asphalt Tile Institute

36. INSTALLATION AND MAINTENANCE SPECIFICATIONS — Recommended specifications for the installation and maintenance of asphalt tile flooring. 8½ x 11. 4 pages. AIA File No. 23-D.

37. MAINTENANCE OF ASPHALT TILE FLOORS IN INSTITUTIONAL, COMMERCIAL AND INDUSTRIAL BUILDINGS—Recommendations for cleaning and waxing asphalt tile floors. 8½ x 11. 4 pages. AIA File No. 23 G (NN).

38. ASPHALT TILE COLOR CLASSIFICATION CHART—Color comparison chart that shows commercial equivalents of the various manufacturers' color lines which give the same general tone or effect. 8½ x 11. 2 pages. AIA File No. 23-D.

39. INSTALLATION SPECIFICATION FOR VINYL PLASTIC ASBESTOS TILE — Recommended specifications for the installation of vinyl plastic asbestos tile flooring. 8½ x 11. 4 pages. AIA File No. 23 G (NN).

40. MAINTENANCE OF VINYL ASBESTOS TILE FLOORS —Recommendations for cleaning and waxing vinyl plastic asbestos tile floors. 3½ x 6. 6 pages.

41. VINYL ASBESTOS TILE COLOR CLASSIFICATION CHART—Color comparison chart that shows commercial equivalents of the various manufacturers' color lines which give the same general tone or effect. 8½ x 11. 2 pages. AIA File No. 23G.

42. PROPER FLOOR PROTECTION DEVICES FOR USE ON HOSPITAL AND SCHOOL EQUIPMENT. — Gives recommended sizes of casters, gliders and furniture cups for hospital and school furniture and equipment where asphalt tile or vinyl plastic asbestos tile flooring is used. 8½ x 11. 4 pages. AIA File No. 23 G (NN).

43. SPECIFICATION FOR ASPHALT TILE—Recommended specification for the physical properties of asphalt tile flooring. 8½ x 11. 10 pages.

44. SPECIFICATION FOR GREASE RESISTANT ASPHALT TILE—Recommended specification for the physical properties of grease resistant tile flooring. 8½ x 11. 4 pages.

45. SPECIFICATION FOR VINYL ASBESTOS TILE—Recommended specification for the physical properties of vinyl asbestos tile flooring. 8½ x 11. 14 pages.

E. L. Bruce Company

46. YOURS FOR A LIFETIME. Data on Bruce Strip Floors (prefinished and unfinished) in color. 1949 8½ x 11. 6 pages.

47. SOMETHING NEW IN OAK FLOORS. Data on Bruce Ranch Plank flooring in full color. 1949. 8½ x 11. 6 pages.

48. INSTALLATION MANUAL FOR BRUCE NAIL BLOCK AND MASTIC BLOCK WOOD FLOORS. Technical information on proper installation of Bruce Block Flooring over wood and concrete sub-floors. 1940. 4 x 9. 16 pages.

49. HOW TO INSTALL STRIP HARDWOOD FLOORING (KEY K). Instructions on proper installation of prefinished and unfinished strip hardwood flooring. 1944. 3⅝ x 6¼. 4 pages.

50. INSTALLATION INSTRUCTIONS—PLANK FLOORING (KEY 48). Technical installation instructions for laying random width planks flooring. 1949. 4 x 8½. Card printed both sides.

51. BRUCE DURA-WOOD BLOCK FLOORS (KEY 104). Technical and descriptive data on heavy duty industrial block floors for use over concrete. 1951. 8½ x 11. 4 pages.

52. BRUCE FLOOR PRODUCTS (KEY 47). Technical and descriptive data on all Bruce floorings and floor care products, in full color. 1949. 8½ x 11. 12 pages.

53. MODERN HARDWOOD FLOORS OF BRUCE BLOCKS (KEY 82). Technical and descriptive data on Bruce Block Floors in full color. 1949. 8½ x 11. 6 pages.

54. BEAUTIFUL, NEW BRUCE LAMINATED OAK BLOCKS. For trouble-free installation over concrete. 3½ x 6. 6 pages (Key 106).

55. HOW TO FINISH AND MAINTAIN WOOD FLOORS. How to finish and care for hardwood and softwood floors using the Bruce penetrating and seal method. 1950. 8½ x 11. Single sheet.

56. BRUCE FIRESIDE PLANK FLOOR. Technical and descriptive details on beveled edge, alternate width, plank with "Midnight" finish. 6 pages.

Congoleum-Nairn, Inc., Gold Seal Div.

254. SWEETS CATALOG INSERT. Patterns in color, recommended uses, technical data and condensed specifications of Gold Seal Linoleum, Nairon Standard, Nairon Custom Cork, Vinylbest, Rubber, Asphalt Tiles, and Static Conductive Linoleum. 1957. 8½ x 11. 32 pages. AIA No. 23-G. B-874.

255. ARCHITECTS SPECIFICATIONS. Complete specifications and recommended uses for every installation of Gold Seal Linoleum, Nairon Standard, Nairon Custom Cork, Vinylbest, Rubber, Asphalt Tiles, and Static-Conductive Linoleum. 58 pages. 8½ x 11. AIA No. 23-G. B-830.

256. CORK TILE FOLDER. Patterns in color, recommended uses and in-use illustrations of new Gold Seal Cork Tile for floors and walls. 4 pages. 8½ x 11. B-685R.

257. WHICH FLOOR GOES WHERE IN RESIDENTIAL AREAS. A pocket size bulletin designed to assist in selecting floor coverings for homes. 22 pages. 3¼ x 6. B-828.

258. FACTS AND DATA ON RESILIENT FLOORING. A new book containing technical data, details, specifications, and description of resilient flooring. 8½ x 11. Illustrated. AIA No. 23G. B-831.

259. GOLD SEAL ⅛" SEQUIN LINOLEUM FOLDER. New folder showing this seven decorator styled product line for commercial and residential use. B-832.

260. GOLD SEAL RUBBER TILE—B-492R.

261. GOLD SEAL ASPHALT TILE—B-796, B-779.

262. GOLD SEAL VINYLBEST FOLDER—B-797.

263. GOLD SEAL NAIRON CUSTOM TILE—B-843.

Dodge Cork Company

307. SWEET'S CATALOG INSERT. 1958 edition. Color plates showing full color line, description, technical data, and specifications of Dodge's Vinyl-Cork, SG Cork, Standard Cork, Vinylwood Cork Tile, Panelcork and Cork Brick wall material. 8 pages. 8½ x 11. AIA File No. 23-G.

B. F. Goodrich Company

341. COMPLETE PRODUCT CATALOG—SC 58. Color plates showing current lines of Rubber Tile, Airpath Tile, Agatine Tile, Koroseal Vinyl Asbestos Tile, Asphalt Tile, Rubber Cove Base, Rubber Stair Treads, Rubaduct and flooring accessories. Also features, specifications and other data. 8½ x 11. 16 pages.

342. RUBBER TILE COLOR GUIDE — Color plates, description, features and specifications for B. F. Goodrich Rubber Tile.

343. KOROSEAL TILE COLOR GUIDE—Color plates, description, features and specifications for B. F. Goodrich Koroseal Vinyl Asbestos Tile.

344. ASPHALT TILE COLOR GUIDE—Color plates, description, features and specifications for B. F. Goodrich Asphalt Tile.

345. LIGHT REFLECTIVITY VALUES — Comparison Chart showing percentage of light reflected by each color of B. F. Goodrich Rubber Tile, "Agatine" Tile, Koroseal Vinyl Asbestos Tile and Asphalt Tile.

346. FLOOR DESIGN CATALOG—Color and black and white plates showing suggested floor tile designs.

347. FACTS ON KOROSEAL—Information showing properties and features of Koroseal Vinyl Asbestos Tile.

348. STATIC LOAD DATA — Comparison Chart showing indentation resistance between B. F. Goodrich Koroseal Vinyl Asbestos Tile and Asphalt Tile under static load conditions.

349. TILE AREA CONVERSION CHART—Handy conversion chart showing room areas, floor tile required, calculations and tables.

350. "AGATINE" TILE COLOR GUIDE—Color plates, description, features and specifications for B. F. Goodrich "Agatine" Floor Tile — with vinyl.

351. "SUPREX" KOROSEAL VINYL FLOOR TILE COLOR GUIDE—Color plates, description, features and specifications for B. F. Goodrich "Suprex" Koroseal Vinyl Floor Tile.

352. "CORINTHIAN" KOROSEAL VINYL FLOOR TILE COLOR GUIDE—Color plates, description, features and specifications for B. F. Goodrich "Corinthian" Koroseal Vinyl Floor Tile.

Johns-Manville Sales Corp.

386. JOHNS MANVILLE TERRAFLEX VINYL ASBESTOS FLOOR TILE. Color chart, design suggestions and description of J-M Terraflex vinyl asbestos floor tile. 1957. 8½ x 11. 8 pages.

387. JOHNS MANVILLE ASPHALT ASBESTOS TILE. Color chart and descriptive information on this durable flooring for home and business. 1957. 8½ x 11. 4 pages.

Kentile, Inc.

429. COLOR CATALOG. Complete color line and specifications of Kentile Floors; Asphalt Tile, Vinyl Asbestos Tile, Solid Vinyl Tile, Cushion-Back Vinyl, Rubber Tile and Cork Tile. 8½ x 11. 24 pages.

430. ARCHITECTS SPECIFICATIONS — Combined and complete specifications for Kentile Floors; Asphalt Tile, Vinyl Asbestos Tile, Solid Vinyl Tile, Cushion-Back Vinyl Tile, Rubber Tile and Cork Tile, 8½ x 11. 16 pages. AIA No. 23-G.

431. KENTILE ASPHALT TILE CATALOG—Complete color line, residential and commercial installations, 8½ x 11. 16 pages.

432. KENTILE RUBBER TILE CATALOG — Complete color line, residential and commercial installations. 8½ x 11. 8 pages.

433. RECOMMENDED AND NOT RECOMMENDED USES OF KENTILE FLOORS — Contains complete recommendations with appropriate installed prices and Light Reflectance values. 8½ x 11. 6 pages.

434. KENTILE SOLID VINYL TILE CATALOG — Complete color line, residential and commercial installations. 8½ x 11. 12 pages.

435. KENTILE CORK TILE CATALOG—Full color room and design illustrations. 8½ x 11. 4 pages.

436. KENTILE VINYL ASBESTOS TILE CATALOG — Complete color line, residential and commercial installations. 8½ x 11. 12 pages.

The Master Builders Company

479. MASTERPLATE "IRON CLAD" CONCRETE FLOOR. Nearly fifty years of successful use has established Masterplate as the most economical floor surface in industry today. The application and many uses of this versatile material for treatment of industrial concrete floors is clearly illustrated by photographs, text, and diagrams. Discussion covers impact, abrasion, dusting, conductivity, and ease of maintenance. 8½ x 11. 24 pages.

Mastic Tile Corporation of America

481. SWEET'S CATALOG INSERT. Color plates showing complete color lines of Matico Asphalt and Vinyl-Asbestos Tile. Includes Architects' specifications, technical data and representative list of flooring installations. 16 pages. 8½ x 11. 1957-58.

482. SWEET'S CATALOG INSERT. Color plates showing complete color lines of Sofstep Rubber Tile and Wearever All-Vinyl Tile. Includes Architects' specifications, maintenance information, technical data. 8 pages. 8½ x 11. 1957-58.

483. MATICO SPECIFICATION BOOKLET. Detailed information on colors, accessories, packaging of Matico Asphalt, Vinyl-Asbestos, Sofstep Rubber, Wearever All-Vinyl Tile and Plastic Wall Tile lines. Includes facts on adhesives, data on where and where not to install tile flooring, suggested floor designs, complete installation instructions, and Architects' specifications. 28 pages. 1957.

484. MATICO DESIGN IDEA BOOK. Shows 36 suggested floor designs. Includes percentage of tile required for each design. 8 pages. 1957.

National Oak Flooring Mfgs. Assn.

133. ARCHITECTS SPECIFICATION MANUAL. Preparation, laying, finishing and maintenance of hardwood floors. 1955. 8½ x 11. 11 pages.

See **United States Ceramic Tile Co.** under TILE.

Azrock Products Division, Uvalde Rock Asphalt Co.

713. SWEETS CATALOG INSERT — 1957-58 Edition. Color plates showing full color line, descriptions, technical data, and specifications of Azrock asphalt tile, Azphlex vinylized tile, Vina-Lux vinyl-asbestos tile and Duraco vinyl industrial tile. Size 8½ x 11. 12 pages.

714. AZROCK FLOOR PRODUCTS INSTALLATION MANUAL. Complete information with illustrations on where and how to install Azrock Floor Products over various types of sub-floors. 8½ x 11. 28 pages.

715. ARCHITECTS FILE FOLDER. Includes various technical articles on light reflectance characteristics of resilient tile, individual detailed architects specifications for the specifying and installing of Azrock floors, and other factual information on resilient flooring.

716. VINA-LUX REINFORCED VINYL TILE CATALOG. Color line in new Micromatic Veining, specifications and characteristics. 8½ x 11. 4 pages.

717. AZPHLEX VINYLIZED TILE CATALOG. Color line with installations, specifications and characteristics. 8½ x 11. 4 pages.

718. AZROCK ASPHALT TILE CATALOG. Color line with installations, specifications and characteristics. 8½ x 11. 4 pages.

719. DURACO VINYL INDUSTRIAL TILE CATALOG. Color line with installations, specifications and characteristics. 8½ x 11. 4 pages.

FLOORING (WOOD) UNDERLAY, CORK

Dodge Cork Company

308. Dodge Cork Company Flyer and data sheets showing advantages of cork composition underlay for hardwood flooring and evaluation of various types of underlay.

FLOOR MACHINES

Hillyard Chemical Co.

362. Complete information on Single Brush Hil Boy new low silhouette 17" and 21" models. Also descriptive matter on Hiltonian Twin Brush models 16" and 19". All models for scrubbing, steel wooling, polishing.

Multi-Clean Products, Inc.

524. BETTER FLOOR CARE, (Form 1561). Describes complete Multi-Clean line of Floor Machines and Scrubbing Machines. Gives information that is helpful in selecting right size and model to do the job. Also describes Multi-Clean Vacuum Cleaners and Floor Waxes, Cleaners, Sealers. 8 pages, illustrated.

FLOOR MAINTENANCE SYSTEMS

Multi-Clean Products, Inc.

525. COMPLETE SPECIFICATIONS OF FLOOR TREATMENTS. Contains suggested specifications for scientific Multi-Clean Method for initial treatment of asphalt tile, concrete, linoleum, rubber tile, vinyl and vinyl asbestos, terrazzo, wood, and all other common type floors. Seventy pages of long and short specification forms on perforated sheets, ready to tear out and use. Also contains specifications for restoring appearance of old floors.

526. LIQUID PRODUCT SPECIFICATION CHART (Form 3000). Describes 30 MULTI-CLEAN Waxes, cleaners, sealers, preservers and their recommended use on wood, concrete, asphalt, rubber and vinyl tile, terrazzo, linoleum, and all other common floors. Gives formulation, coverage, method of application, etc.

527. MULTI-CLEAN METHOD FOR MAINTAINING TERRAZZO OR OXYCHLORIDE FLOORS (Form 1405). Describes scientific Multi-Clean Method for initial treatment of Terrazzo or Oxychloride floors, including materials, equipment, and technique. Also includes step-by-step instructions for low cost maintenance and restoring brilliance to old Terrazzo or Oxychloride.

528. MULTI-CLEAN METHOD FOR MAINTAINING ASPHALT TILE FLOORS. (Form 1401). Describes scientific Multi-Clean Method for initial treatment of asphalt tile floors, including materials, equipment, and technique. Includes step-by-step instructions for low cost daily maintenance and restoration of old asphalt tile.

529. MULTI-CLEAN METHOD FOR MAINTAINING RUBBER TILE FLOORS (Form 1402). Describes scientific Multi-Clean Method for initial treatment of rubber tile, including materials, equipment, and technique. Also includes step-by-step instructions for low cost maintenance and restoration of old rubber tile floors.

530. MULTI-CLEAN METHOD FOR MAINTAINING VINYL TILE FLOORS (Form 1403). Describes scientific Multi-Clean Method of initial treatment of vinyl and vinyl asbestos tile floors, including materials, equipment, and technique. Also includes step-by-step instructions for low cost maintenanec and restoration of old vinyl floors.

531. THE MULTI-CLEAN METHOD FOR TREATMENT OF: ASPHALT TILE FLOORS (Form 1401) . . . RUBBER TILE FLOORS (Form 1402) . . . VINYL AND VINYL ASBESTOS FLOORS (Form 1403) . . . CONCRETE FLOORS (Form 1404) . . . TERRAZZO AND OXYCHLORIDE FLOORS (Form 1405). This series of 4 page folders describe materials, equipment, and step-by-step instructions for initial treatment, daily maintenance, and restoration of floors. Illustrated.

532. MULTI-CLEAN METHOD FOR MAINTAINING CONCRETE FLOORS (Form 1404). Describes scientific Multi-Clean Method for initial treatment of concrete floors, including materials, equipment, and technique. Also includes step-by-step instructions for hardening and etching, sealing, future maintenance, and treatment of old concrete floors.

FLOOR PATCHING AND REPAIRING

The Master Builders Company

480. EMBECO PRE-MIXED MORTAR. A ready-to-use non-shrink mortar for repair of concrete floors and walls. Long life floor patches are easily made by following simple seven step procedure. The material hardens rapidly and is highly resistant to impact, abrasion, chemical corrosion, and to the penetration of water. 8½ x 11. 6 pages.

FLOOR TREATMENT MATERIALS

Hillyard Chemical Co.

Specification Files for Proper Treatment of ALL types of floors. The following files contain architect specification and long form

contractor's "how to apply" specs. Fully illustrated step by step procedures. Designed so that the architect may attach it with specifications for contractor or painters to follow. Same size as standard file folders. Revised and reprinted 1955. AIA No. 25-G.

363. CONCRETE.

364. TERRAZZO.

365. RESILIENT.

366. WOOD.

367. GYM FLOOR.

368. SWEET'S FILE ARCHITECTURAL CATALOG. Same catalog that is in Sweet's catalog covering specifications and information on products. 1955. 8½ x 11. 4 pages. AIA No. 13-M-1.

369. PROPER MAINTENANCE FOR CONDUCTIVE FLOORS.

FORMS

See **Ceco Steel Products Corporation** under FLOOR CONSTRUCTION SYSTEMS.

FRAMING, METAL

Ceco Steel Products Corporation

245. CECOFRAME RIGID STEEL-FRAME BUILDINGS, Bulletin No. 7061. Folder giving advantages, foundation plan, framing details, erection photographs and table of dimensions. 1957. 8½ x 11. 8 pages.

See **Ceco Steel Products Corporation** under FLOOR CONSTRUCTION SYSTEMS.

Penn Metal Company, Inc.

584. PENMETAL LIGHTSTEEL STRUCTURAL SECTIONS. 24 pages. Components include a complete range of studs, joists, track and bridging for custom steel framing of schools, hospitals, houses, light industrial and commercial structures, load-bearing partitions and exterior curtain wall framing. The sections are fabricated from structural grade, strip steel by cold forming and are designed specifically for strength, light weight and low cost. The LIGHTSTEEL nailing groove permits easy and economical attachment of collateral materials. Catalog features descriptions of the sections, specifications, dimensions, physical and structural properties, and tables giving uniform loads for joists, maximum allowable axial loads for studs, etc.

585. TECHNICAL MANUAL ILLUSTRATING METHODS OF APPLYING COLLATERAL MATERIALS to Penmetal LIGHTSTEEL structural sections. Designed to provide a complete and economical system of steel framing for the light building field, these sections offer all the advantages inherent in steel and, in addition, are scientifically engineered for low-cost fabrication and erection. Joists, studs, track and bridging are designed to fit together for ease of assembly and welding. Because of their light weight, complete wall units can be readily trucked to the job site where they can be erected in a few minutes. Isometric drawings in the manual show application of collateral materials for interior and exterior wall, floor, roof and ceiling constructions. Typical partition, door and window details, as well as vapor barrier and thermo-insulation applications are also shown.

Stran-Steel Corp.

651. STRUCTURAL SYSTEMS. 24 pages of useful data on Stran-Steel fully integrated components. Specifications, dimensions and properties, load spans, design examples and applications.

652. NAILABLE FRAMING. 32 pages showing use of nailable framing in combination with various materials for floors, ceilings, interior and exterior walls. Plus a section on fire ratings.

Unistrut Products Co.

673. NO. 700 GENERAL CATALOG. Complete catalog on the UNISTRUT Framing System, highlighting construction applications—mechanical and electrical supports—as well as the use of UNISTRUT to build Racks, Displays, Partitions, etc. 1957 reprint. 8½ x 11. 68 pages. AIA File No. 14-G.

674. NO. 810 POCKET SIZE PARTS CATALOG. Complete parts catalog with drawings, description, weights, and other pertinent data for all standard UNISTRUT channel, fittings, and parts. 1958. 4$\frac{3}{16}$ x 5½. 152 pages. AIA File No. 14-G.

See **Unistrut Products Co.** under RACKS, STEEL.

FRAMING, WOOD

Timber Structures, Inc.

654. ENGINEERED TIMBER CONSTRUCTION. Illustrations, descriptive matter, dimensional data, specifications for arches, beams, rigid frames, domes and trusses as used in modern construction. 1958. 8½ x 11, 24 pages.

655. CHURCH CONSTRUCTION WITH ENGINEERED TIMBERS. Illustrations, descriptive matter, dimensional data, specifications of glued laminated arches and beams used as structural framing in church construction. 1958, 8½ x 11, 12 pages.

656. SCHOOL CONSTRUCTION WITH ENGINEERED TIMBERS. Illustrations, descriptive matter, dimensional data, specifications of glued laminated arches and beams used as structural framing in school construction. 1957. 8½ x 11, 16 pages.

657. TIM-DECK HEAVY TIMBER DECKING. Illustrations, descriptive matter, application drawings, specifications of heavy timber decking. 1955. 8½ x 11, 8 pages.

GARAGE DOORS

Overhead Door Corp.

143. THE OVERHEAD DOOR. Sectional, upward-acting door for commercial buildings, industrial plants, residential garages.

GLASS

Libbey-Owens-Ford Glass Co.

447. HOW TO INSTALL THERMOPANE IN A SIMPLE WOOD FRAME. Describes simplified framing. Lists non-standard and standard sizes of units. 1958. 8½ x 11. 4 pages.

448. HOW TO GET NATURE-QUALITY LIGHT FOR SCHOOL CHILDREN. Use of large areas of flat, transparent glass for best results in school room daylighting. 1957. 8½ x 11. 24 pages.

449. THERMOPANE MANUAL. Technical data on Thermopane insulating glass. 1958. 8½ x 11. 16 pages. AIA File No. 26-A.

450. TRANSPARENT MIRRORS AND FRONT SURFACE MIRRORS. Describes composition of Mirropane and gives suggested uses, size limitations, how to install for proper use. 1955. 8½ x 11. 4 pages.

451. GLASS FOR CONSTRUCTION. Condensed information on all products pertaining to construction. 1958. 8½ x 11. 28 pages. AIA File No. 26-A.

452. STANDARD SIZES OF THERMOPANE. Lists standard sizes of Thermopane, types and manufacturers of sash. 1957. 8½ x 11. 8 pages. AIA File No. 26-A.

453. HOW TO REDUCE SOLAR RADIATION. Tells how Heat Absorbing and Parallel-O-Grey polished plate glass and heat absorbing Thermopane reduce solar heat gain, help save air-conditioning costs. 1958. 8½ x 11. 4 pages.

454. SCHOOL GLAZING SPECIFICATIONS. Includes isometric of mythical plan to aid building committees and architects in selecting the right glass products. 1956. 8½ x 11. 6 pages. AIA No. 26-A. Also available, another folder on Hospital Specifications.

455. BLUE RIDGE GLASS FOR INDUSTRIAL BUILDINGS. Technical data on Blue Ridge light diffusing patterns, HUE-WHITE glare reducing, wired, SECURIT heat tempered and AKLO heat absorbing glass. 1958. 8 pages.

Pittsburgh Plate Glass Company

144. CARRARA COLORFUL STRUCTURAL GLASS. Details

and illustrations on toilet room compartments. The ten Carrara colors are shown on color chips. Suggested specification data is given for both interior and exterior work. 8½ x 11. 8 pages. AIA File No. 26-A-5.

144A. "PITTSBURGH DOORWAYS". Detailed drawings and dimensions of various styles of Pittsburgh Doorways and Herculite Doors. 1958. 8½ x 11. 20 pages. AIA File No. 16-N.

145. "HOW TO PUT YOUR BEST STORE FRONT FORWARD." Illustrates commercial exteriors. 8½ x 11. 32 pages.

146. "TWINDOW, THE WINDOW WITH BUILT-IN INSULATION". Describes and illustrates residential and commercial uses of Twindow. 1953. 8½ x 11. 12 pages.

147. STORE FRONT DETAILS. Details of all Pittsburgh products normally included in store front design. 1958. 8½ x 11, loose-leaf, five ring manual, 102 pages.

148. PITTSBURGH GLASS PRODUCTS. General information about complete line of Pittsburgh products. 1956. 8½ x 11. 12 pages. AIA File No. 26-A-2.

149. PITTCO STORE FRONT METAL. Details and specifications. 1958. 8½ x 11. 16 pages. AIA File No. 26-D.

150. 1958 ARCHITECTURAL SPECIFICATIONS. Paint specifications. 8½ x 11. 24 pages.

151. PITTSBURGH GLASS-CLAD BUILDINGS. Describes 82-X curtain wall system, CARRARA and SPANDRELITE for curtain wall construction. 16 pages. AIA No. 17A.

152. ARCHITECTURAL DATA HANDBOOK. Pertinent facts on the complete line of Pittsburgh Glass, Metal and Paint Products. 4½ x 7. 88 pages.

GLAZING

National Paint, Varnish & Lacquer Assn.

549. CIRCULAR 735. Facts About Glazing.

GLAZING COMPOUNDS

Dicks-Armstrong-Pontius, Inc.

300. CATALOG PAGES: Description of characteristics and applications for DAP glazing compounds and tapes. 8½ x 11. 2 pages.

301. DATA SHEETS: Describe new DAP Flexiseal liquid polymer compounds with Thiokol base. 8½ x 11. 7 pages.

GRANITE

Vermont Marble Co.

721. GRANITE VENEER FOR THE EXTERIOR OF OLD AND NEW BUILDINGS. Complete specifications and section details. 8 full color illustrations of various granites. 4 pages. 8½ x 11. AIA No. 8-D-3. 1957.

GRATINGS

Penn Metal Co., Inc.

586. PENMETAL EXPANDED METAL GRATINGS—4 page illustrated folder. Folder gives sizes, weights, dimensions and deflection tables for the various meshes available.

GREASE INTERCEPTORS

Josam Mfg. Co.

410. BROCHURE "JH". Details and specifications covering the only grease interceptor that automatically draws off intercepted grease at the turn of a valve. 4 pages. 8½ x 11. 1956. 29-C-4.

411. MANUAL W. Handling the interception problem of every type of commercial and industrial waste material. 1956. 8½ x 11. 28 pages. AIA No. 29-CH.

J. A. Zurn Mfg. Div.

768. ENZYMATIC GREASEPTION. Form 20-ADV. Introduces a revolutionary new approach to the age-old problem of manual grease interception and disposal. Enzymes introduced through treatment port in greaseptor cover automatically liquefy accumulated grease in a non-reversible action. Four pages. 8½ x 11. AIA File No. 29-C-4.

769. GREASEPTOR BOOKLET. Form No. 6-52. A complete study and analysis of grease interceptor needs, with recommended installations and methods of determining proper sizing. Revised 1955. 16 pages. 8½ x 11. AIA File No. 29-C-4.

770. INTERCEPTOR (SOLIDS) PAMPHLET. Form No. 7-52. Suggests many applications heretofore overlooked in the elimination of solids from waste lines. 4 pages. 8½ x 11. AIA File No. 29-C-4.

HARDBOARD

United States Plywood Corp.

689. WELDWOOD HARDBOARDS. Describes characteristics and applications. 2 colors, 6 pages. 3¼ x 6¼. Form #1370.

HARDWARE

Glynn-Johnson Corporation

82. CATALOG OF BUILDERS' HARDWARE (AIA File No. 27B). Full descriptive data and templates of complete GJ line of door control hardware. Overhead arm type spring cushioned door stops and holders. Wall and floor mounted door holders and bumpers. Cabinet latches, invisible latches and silencers. Hardware specialties for all types of buildings, including theaters, stores, schools, hospitals, office buildings and institutions.

83. DOOR CONTROL HARDWARE (18e/G1). A condensed catalog of cushioned overhead door holders, wall and floor installed door holders and bumpers for entrance and interior doors. Also door silencers and latches.

84. SCHOOL DOOR CONTROL HARDWARE (B-9/G1). Door control hardware for entrance, gymnasium and all interior doors. Hardware built to absorb shock and sound as well as to protect doors and frames.

85. HOSPITAL DOOR CONTROL HARDWARE (E-11). Door holding devices for entrance, supply and utility room doors. Complete hardware for the silent operation and control of patient room doors.

Stanley Works

648. INTERIOR SLIDING AND BI-FOLD DOOR HARDWARE G88R. Product listing and detailed installation information on space saving sliding door hardware. 1958. 8½ x 11. 8 pages. AIA No. 27-A.

649. NO. 81 HARDWARE CATALOG. Complete data on hardware with introductory section. Hinges cabinet, black ornamental, general hardware, interior sliding door, bi-fold door hardware, etc. 1958. 5⅝ x 7½. 350 pages.

Vonnegut Hardware Co., Von Duprin Div.

726. 53V—General Catalog. Covers the full line of exit devices, showing specifications numbers for different applications and outside functions. Also shown are details on thresholds, mullions, co-ordinators, metal astragals, compensating astragal fixtures, outside trims, mortise locks, cylinders, strikes, and electric-release strikes.

727. A2-B2—An 8-page bulletin covering the finest in exit device hardware and auxiliary items.

728. 88V—An 8-page section on the new reversible rim type device. (88 device) and selected auxiliary items.

729. 88V2—An 8-page section on the type 88 mortise and vertical rod devices. Companion pieces to the 88 rim type device.

730. Bulletin 576—An 8-page bulletin covering the new line of Von Duprin Push and Pull hardware.

731. WDC—A 2-page bulletin showing the application of concealed exit device hardware to wooden doors.

HEATING

Frank Adam Electric Co.

14. ELECTRIC HEATERS. Description and Data on "QUIK-HETERS." Electric type built in heaters.

American Radiator & Standard Sanitary Corp.

202. AMERICAN-STANDARD RADIATOR HEATING (CATA. Ratings. Data and Dimensions Manual). Provides all information necessary for selecting, sizing and specifying wet heat equipment. Selector guides make it easy to use. 1957. 8½ x 11. 128 pages.

See **Minneapolis-Honeywell** under AIR CONDITIONING.

HOSPITAL EQUIPMENT

American Radiator & Standard Sanitary Corp.

203. AMERICAN-STANDARD HOSPITAL EQUIPMENT (CATA. H-53). Designed to aid the architect, builder and hospital planning staff. Clearcut illustrations and dimensional drawings simplify selection and sizing of product. Index tabs and selector guides clearly categorize each section. 1953. 9½ x 11¼. 118 pages.

Crane Co.

273. CRANE QUALITY PLUMBING FIXTURES FOR THE MODERN HOSPITAL (AD-2208). Condensed catalog illustrating and describing more popular lavatories, sinks, closets and other plumbing fixtures. 12 pages.

INSULATION

Armstrong Cork Co.

222. ARMSTRONG ACOUSTICAL AND INSULATION FORMBOARDS. Complete description, technical data and specifications on Armstrong Formboards. 1958. 12 pp. 8½ x 11.

223. ARMSTRONG INDUSTRIAL INSULATIONS. Descriptions, technical data, and specifications on complete line of insulation materials for use from 300° below zero to 3000° F. Corkboard, Cork Coverings, Armalite, Armaflex, heat insulations, and insulating refractories included. 1958. 40 pages. 8½ x 11.

See **The Dow Chemical Company** under CURTAIN WALLS, INSULATION-LOW TEMPERATURE, INSULATION-BUILDING.

Johns-Manville Sales Corp.

388. JOHNS-MANVILLE SPINTEX INSULATION. Description of J-M Spintex Mineral Wool Batts and Blankets for home insulation. 1956. 8½ x 11. 6 pages.

Miracle Adhesives Corp.

514. MIRA DATA SHEET No. 8. Protekto-Flex "Zip-on" Polyvinyl Jacket with Built-in Fibrous Glass Insulation for Copper Tubing and All Iron Pipe Sizes. 8½ x 11. 4 pages.

See **Miracle Adhesives** under ADHESIVES.

Owens-Corning Fiberglas Corp.

574. FIBERGLAS INDUSTRIAL INSULATIONS CATALOG (1-IN-335). Fiberglas Products for pipes, ducts, equipment; product data, properties, uses, design data, specifications. 1953. 8½ x 11. 78 pages.

575. INSULATION DESIGN FOR THE AIR CONDITIONED HOME (1-BL-64). Design principles, insulation study, fiberglas performance data, product information. 1955. 8½ x 11. 20 pages. AIA No. 37-C.

See **Vermiculite Institute** under VERMICULITE PRODUCTS.

Zonolite Co.

755. ZONOLITE INSULATION DATA BOOK. "U" values of wall and ceiling construction, plus diagrams and application data on Zonolite Insulating Fill. HI-102. 1957. AIA No. 37-C-2. 4 pages. 8½ x 11.

756. Z-CRETE UNDERGROUND PIPE INSULATION. Method of installation, photos, diagrams, on this applicator applied system for insulating underground heated piping. Z-1. 1953. AIA No. 37-D-2. 8 pages. 8½ x 11.

757. INSULPAVE. Asphalt bound vermiculite insulation for quick-drying roofs, floors, cold storage, etc. G-55. 1952. AIA No. 37-B. 4 pages. 8½ x 11.

758. ZONOLITE BUILDING INSULATION. Properties of vermiculite, general information on building insulation, typical "U" values. HI-87. 1956. AIA No. 37-C-2. 4 pages. 8½ x 11.

759. B-T-U—Low cost system of insulating underground hot pipes. Monolithic, job-poured. Z-12, 1957. AIA No. 37-D-2. 4 pages. 8½ x 11.

INSULATION ACCESSORIES

Miracle Adhesives Corp.

515. ARCHITECTURAL BULLETIN No. 3—"Z" CLIP FOR INSULATION BOARD. 8½ x 11. 4 pages.

516. MIRA DATA SHEET No. 7. Protektinsul "Zip-on" Polyvinyl Pipe Insulation Cover. Description of New Outer Finish for Covering and Protecting Pipe Insulation. Eliminates Painting Maintenance. 8½ x 11. 4 pages.

INSULATION, BUILDING

Celotex Corporation

62. TECHNICAL SERVICE DATA NO. 2, FEDERAL, ASTM, & NAVY SPECIFICATIONS. Selections of Celotex Building Products complying with these specifications. 1955. 8½ x 11. 4 pages. AIA File Nos. 40-B-3, 40-B-6.

63. STRUCTURAL INSULATION SECTION, SWEETS ARCHITECTURAL FILE. Description of Celotex Structural Fiberboard Products, physical property data and application specifications. 1956. 8½ x 11. 24 pages. AIA File No. 37-A.

64. ARCHITECT SPEC. NO. 20, REGULAR ROOF INSULATION. Description of product, recommended uses, physical property data and detailed specifications. 1956. 8½ x 11. 4 pages. AIA File No. 12-B.

65. ARCHITECT SPEC. 21, PRESEAL AND PRESEAL "30" ROOF INSULATION. Recommended uses, physical property data and detailed specifications for application over all types of roof decks. 1956. 8½ x 11. 4 pages. AIA File No. 12-B.

66. ARCHITECT SPEC. NO. 23, CELOTEX CHANNEL-SEAL ROOF INSULATION. Description, uses, physical properties, special features, advantages, and detailed specifications for use over all types of roof decks. 1956. 8½ x 11. AIA File No. 12-B.

67. ARCHITECT SPEC. NO. 30, CELOTEX INTERIOR FINISH PRODUCTS. Complete description and specifications for application of Building Board, Tile Board, and Finish Plank. 1955. 8½ x 11. 4 pages. AIA File No. 23-L.

The Dow Chemical Company

313. CONSTRUCTION DETAIL FOLDER. Specifications and detailed drawings for residential applications for Styrofoam as perimeter and plaster base-insulations. 157-30.

314. SCORBORD: PERIMETER INSULATION. Properties, installation, instructions, and specifications for perimeter insulation. 157-43. (Sweets Catalog Insert).

315. INSULATION-PLASTER BASE CONSTRUCTION. Insulation-plaster base installation with Styrofoam for comfort insulation. 157-49. (Sweets Catalog Insert).

National Mineral Wool Assn.

125. HOW TO INSTALL MINERAL WOOL BATTS AND BLANKETS IN HOUSES AND BUILDINGS. Illustrated instruc-

tions on how mineral wool batts and blankets should be installed in houses and buildings. 8½ x 5½. 8 pages. 1953.

126. HOW TO GET THE MOST VALUE FROM YOUR MINERAL WOOL INSULATION. How to get maximum warmth or coolness, also common sources of moisture from bathing, cooking, washing within the house and what to do about them. 1950. 8½ x 5½.

127. HOW TO CONTROL MOISTURE IN HOMES. Complete discussion of sources of moisture from outside, inside, and underside of homes and what can be done about correcting them. Illustrated, form for homeowner to make his own check on his house. 1953. 8½ x 5½. 72 pages. Price to Producers' Council members, architects, engineers 20¢ copy (at cost, prepaid).

128. HOME INSULATION WITH MINERAL PRODUCTS BUREAU OF MINES I.C. 7388. Recommendations of the United States Bureau of Mines about insulating buildings with mineral insulations. 1946. 4 x 9. 12 pages.

129. FIRE CAN BE STOPPED. How mineral wool insulation adds fire resistance to buildings of all types. 1952. 7 x 9¼. 26 pages.

130. HOW TO INSTALL MINERAL WOOL PNEUMATICALLY IN HOUSES AND BUILDINGS. Standards of good practice for insulating existing buildings and hidden areas. 8 pages.

131. HOW TO INSULATE YOUR HOME FOR ELECTRIC HEATING. Insulation recommendations of Electric House Heating Equipment Section of N. E. M. A. 16 pages.

132. CUTTING AIR CONDITIONING COSTS WITH INSULATION. Comparative study of equipment and operating costss in widely varying climates.

Owens-Corning Fiberglas Corp.

576. FIBERGLAS INSULATIONS FOR LIGHT CONSTRUCTION (1-BL-63). Values of insulation, design tables, ventilation design, product selector chart, design and application data. 1952. 8½ x 11. 20 pages. AIA File No. 37-C.

577. FIBERGLAS BUILDING PRODUCTS. Condensed product and design data on the complete line of Fiberglas Building Insulations. 1954. 8½ x 11. 8 pages. AIA File No. 37.

578. FIBERGLAS BLOWING WOOL (BL6.A2). Fiberglas Product Data; design recommendations, ventilation design recommendation, application methods, and specifications. 1954. 8½ x 11. 12 pages. AIA File No. 37-B-2.

579. FIBERGLAS PERIMETER INSULATION FOR CONCRETE FLOOR SLABS AND CRAWL SPACES (1-BL-62). Fiberglas Product Data; design details, installation methods, condensed specifications. 1953. 8½ x 11. 8 pages. AIA File No. 37-B-3.

See **Vermiculite Institute** under VERMICULITE PRODUCTS.

INSULATION FASTENERS

See **Ramset Fastening System** under FASTENINGS.

INSULATION, HIGH TEMPERATURE

See **Vermiculite Institute** under VERMICULITE PRODUCTS.

Zonolite Co.

760. ZONOLITE HIGH TEMPERATURE INSULATING CEMENT. Technical data and illustrations on premixed high temperature cement for builders, refineries, hot lines, etc. G-18. 1952. 8 pages. 8½ x 11.

INSULATION, LOW TEMPERATURE

The Dow Chemical Company

316. STYROFOAM FOR LOW TEMPERATURE INSULATION. Complete installation instructions for coolers, freezers, and sharp freezer rooms, including properties and specifications. 157-3.

317. LOW TEMPERATURE SPACE INSULATION. Cooler and freezer insulation specifications and details for Styrofoam. 157-50. (Sweets Catalog Insert).

318. LOW TEMPERATURE PIPE AND VESSEL INSULATION. Installation data and specifications for pipe and vessel insulation below 175° F. 157-51. (Sweet Catalog Insert).

319. LOW TEMPERATURE SANDWICH ROOF CONSTRUCTION. Technical data, installation specifications, and details for sandwich roof construction for cooler and freezer space. 171-71.

See **The Dow Chemical Company** under CURTAIN WALLS.

See **Vermiculite Institute** under VERMICULITE PRODUCTS.

INTERIOR BUILDING MARBLE

Marble Institute of America, Inc.

461. STANDARD SPECIFICATIONS AND SCALE DETAILS OF INTERIOR MARBLE. Standard Specifications (ASA) for Interior Marble and Exterior Marble Veneer. Marble information and Marble Service. 1955. 8½ x 11. 24 pages and 20 plates. AIA File No. 22-A.

462. CARE AND CLEANING OF MARBLE. Cleaning of Interior Marble, Cleaning of Exterior Marble, Cleaning by Poultice Method, Stain Removal, Marble Cleaning Precautions, Materials suggested by the MIA. 1949. 8½ x 11. 20 pages. AIA File No. 22-A.

463. MARBLE FORECAST—1956-57. Shows domestic quarries, what they quarry, at what rate per month, soundness ratings, approximate color ranges. Classifications for soundness. Some information on imported marbles. Annually. 8½ x 11. 8 pages. AIA File No. 22-A.

464. MARBLE FOR THE MODERN BANK. Illustrations show that marble in the modern large and small bank is monumental, modern, economical, beautiful, easy to maintain and is available. 1954. 8½ x 11. 12 pages. AIA File No. 22-A.

465. MARBLE FOR THE HOME: Illustrations of interiors using marble, fireplaces, furniture tops, bathrooms, miscellaneous —list of MIA members, etc. 1954. 8½ x 11. 16 pages. AIA File No. 22-A.

466. PROOF THAT MARBLE COSTS LESS, WEARS BETTER, LASTS LONGER. Folder citing the advantages and economies of marble with case histories of actual installations. 8½ x 11. Illus. 20 pages. AIA File No. 22-A.

467. FURTHER PROOF THAT MARBLE COSTS LESS, WEARS BETTER, LASTS LONGER. Folder citing the advantages and economies of marble in relation to the total cost of the building. 8½ x 11. Illustrated. 28 pages. AIA File No. 22-A.

468. MARBLE USED AS A RADIATION SHIELD. 32 pages of charts and illustrations in support of the text matter by Dr. Marshall Brucer, Chairman Medical Division, Oak Ridge Institute of Nuclear Studies, Inc., under contract with the Atomic Energy Commission. Shows thickness of Marble to shield a point 3 feet—7½ feet and 12 feet from the source using a Cobalt 60 Hectocurie Machine—540 rhm. 8½ x 11. AIA File No. 35-No.-3 (NN).

469. "AMERICAN STANDARD SPECIFICATIONS (ASA) for the Support, Anchorage and Protection of Exterior Marble Veneer Two Inches and Less in Thickness" and "Exterior Marble Used in Church or Panel Walls". 8½ x 11. 14 pages. 10 detail plates. AIA File No. 8-B-1.

470. MARBLE. A 28 page all purpose brochure illustrating the many current uses of interior building marble and exterior marble veneer less than 2" in thickness. 8½ x 11. AIA File #22-A.

471. MODERN SCHOOL BUILDING. A Study in True Values. A detailed discussion of economy in school construction profusely illustrated with examples of contemporary design. 28 pages. 8½ x 11. AIA File #22.

INTERIOR METAL TRIM

Inland Steel Products

376. MILCOR CONVECTOR ENCLOSURE WALL UNITS

CATALOG No. 105. Milcor Convector Enclosure Wall Units completely enclose and conceal the mechanical heating and air conditioning units behind an attractive, modern cover that blends into all interior schemes. Available in a range from simple enclosures for individual convectors to completely integrated metal interiors composed of convector enclosures, window trim and matching wainscot panels. Description and installation details are included in this four-page catalog.

377. MILCOR INTERIOR METAL TRIM CATALOG NO. 102. The Milcor Interior Metal Trim line, manufactured by Inland Steel Products Company, is the most complete line available from one source. It offers a wide range of designs in Metal Window Stools and Trim, Metal Bases, Stop Moulds, Cove Moulds, Picture Moulds, Chair Rail and Blackboard Trim. All items are completely illustrated and described in Catalog No. 102.

INTERIORS, MOVABLE

See **The Mills Company** under PARTITIONS.

United States Plywood Corp.

690. WELDWOOD PARTITIONS AND MOVABLE PARTITION PANELS. Contains details and technical data on Weldwood Partitions and Movable Partition Panels. 12 pages. 8½ x 11. Form #1764.

JALOUSIES

See **Ludman Corporation** under WINDOWS.

Stanley Works

650. STANLEY BUILDING SPECIALTIES COMPANY. Installation details and uses of jalousies windows and doors. 8½ x 11. 4 pages. AIA No. 16-L.

Truscon Steel Division

665. ALUMINUM JALOUSIE WINDOWS. Installation details, sections and specifications. 16 pages. 8½ x 11.

KITCHEN EQUIPMENT

Crane Co.

274. NEW IDEAS FOR KITCHEN PLANNERS—FORM AD-2043R1. 16 page catalog illustrating decorator planned kitchens in full color. Also specifications and information on Crane's complete line of steel kitchen equipment.

The Peelle Company

582. PEELLE PASS WINDOWS. Complete details and specifications for Peelle pass window both single section and two section. 1957. 8½ x 11. Four pages. AIA #16-1.

J. A. Zurn Mfg. Div.

771. ZURN SYSTEM FOR SUPPORTING OFF-THE-FLOOR KITCHEN EQUIPMENT. Bulletin 54-7A. Introduces a new concept of rigidly supporting wall-sinks, steamers, kettles, and double boilers completely off-the-floor. 4 pages. 8½ x 11. AIA File No. 29-H-8.

LATH

Ceco Steel Products Corporation

246. CECO METAL LATH AND ACCESSORIES, BULLETIN No. 5004-G. Sizes and weights of lathing products and accessories. 1958. 8½ x 11. 12 pages. AIA No. 20-B-1.

Inland Steel Products

378. MILCOR METAL LATH AND ACCESSORIES CATALOG NO. 202. Milcor Catalog No. 202 contains detailed information on the complete line of Milcor Metal Lath and lathing accessories manufactured by Inland Steel Products Co. Complete information on sheet sizes, materials, weights and packing; and tables listing maximum spacing of supports for various types of lath and safe loads for rib laths used as centering for wet concrete. Also describes lathing accessories such as Milcor Metal Access Doors, Corner Bead, Casing Bead, Base Screed, Picture Moulds, Casing Moulds, and solid and hollow partition systems.

Penn Metal Co., Inc.

587. METAL LATH AND PLASTERING ACCESSORIES—24 pages giving description, illustration, profile drawing and specifications for more than 30 different products. Among these are five styles of metal lath, cold-rolled channels, cornerite, metal arches, corner beads, base screeds and picture mold. Also includes details of Penmetal casing beads, which are made in the most complete line available today; steel studs for non-bearing hollow partitions; metal base and ceiling runners. Gives complete specifications for the erection of metal lath.

588. PLASTERERS' EXPANSION JOINT—4 pages giving details of an expansion joint designed to reduce cracking in plastered walls and ceilings and cement plaster exterior stucco.

Truscon Steel Division

666. TRUSCON METAL LATH AND ACCESSORIES. Description, properties and sizes of metal lath products. Complete specifications, summary of fire resistive ratings. 8½ x 11. 36 pages. AIA No. 20B-1.

LIGHTING

The Wakefield Company

732. SIGMA I. A 12-page three-four color brochure illustrating and describing in detail multi-function modular ceilings which integrate the plane of light with acoustical baffles, sprinkler heads, air diffusers and movable partitions.

733. THE WAKEFIELD CEILING. An 8-page booklet introducing the architectural profession to a means of providing luminous acoustical environments with full performance installation and construction details. A supplement "Aids to Architects and Engineers" provides step by step procedure for assistance in specifying and planning.

734. OMEGA AND BETA (WAKEFIELD GEOMETRICS). Two different 8-page two-color folders, one on Omega (an on-surface ceiling luminaire) the other on Beta (a recessed ceiling luminaire), both in modular sizes of 1′ x 4′, 2′ x 2′, 2′ x 4′, and 4′ x 4′, both with Rigid-Arch plastic diffusers, or with louvers.

735. THE CAVALIER. A two-color, 8-page folder illustrating a new symmetrical fluorescent direct-indirect luminaire with full length luminous plastic side panels and sliding stem plates which permit mounting at any position along the channel body.

736. THE GRENADIER. A two-color, 8-page folder illustrating a richly designed fluorescent louvered unit with a translucent plastic side panel which becomes a luminous white when lamps are lit. Side panel and louver can be removed readily for easy maintenance.

737. PACEMAKER '57. 8-page, 2-color folder illustrating a moderately priced fluorescent luminaire available in 45° x 45° or 25° x 35° shielding, illuminated or solid metal side panels, four or eight foot lengths.

738. 1958 SWEET'S CATALOG SERVICE SECTION. A 4-page folder in two colors presenting a brief description of the above mentioned lighting equipment. Available on request from Wakefield.

739. ENGINEERING TESTS. Rendered by leading consultants and research centers providing factual information on the performance of Wakefield lighting products.

740. THE MAGIC CEILING. 2-color, 2-page folder illustrating a new concept in luminous ceilings using fluorescent channels from which a grid with Wakon vinyl diffuser is suspended. Manufactured in 11 packaged catalog sizes, it is adaptable to any area, "floats" free from side wall, and modernizes over night.

741. THE SUNSHINE CEILING. 4-pages, 2-colors. The first residential type luminous ceiling to fit the standard bathroom

or kitchen. Incandescent or fluorescent lamps provide evenly diffused light through Wakon vinyl diffuser or sturdy framed, pressed vinyl geometric patterns.

742. C-57 LIGHTING EQUIPMENT CATALOG. A 60 page Catalog featuring 13 basic models with factual data on dimensions and light distribution. Details for laying out countless designs of the new Wakefield Ceiling '58 and how the Company's new troffer lines and other recessed equipment fit various ceilings.

743. HIGH FREQUENCY LIGHTING — NEW BOOKLET CATALOG. A bound booklet on theory, generation, progress and application of high frequency-high voltage current to lighting, suitable for 400 to 600 volt-840 cycle operation.

LIGHTING CONTROLS

Minneapolis-Honeywell Regulator Co.

510. HONEYWELL'S LIGHT SAVER CONTROLLED LIGHTING (76-3672). Describes and illustrates Honeywell's automatic control of artificial lighting in buildings with "daylighting" walls and fenestration. Shows how automatic shutting off and relighting of lights can save enough to pay for the daylighting materials. 1957, 8½ x 11, 2-color, 4 pages.

511. DIM-A-LITE BRIGHTNESS CONTROL (76-2922). Discusses the four stages of illumination offered by the Dim-A-Lite, and pictures its unique decorator feature. 1957, 9 x 4, 4-color, 6 pages.

512. HONEYWELL TAP-LITE DECORATOR WALL SWITCH (76-3173). Describes the Honeywell Tap-Lite decorator wall switches, the first completely new concept of line-voltage wall switch design. Includes specifications and ordering information. 1957, 8½ x 11, 2-color, 2 pages.

LIGHTING FIXTURES

Curtis Lighting, Inc.

76. CURTIS 1958 SWEET'S INSERT, an eight paged, two-color condensed catalog of all Curtis luminaires, both fluorescent and incandescent for surfaced or recessed mounting.

77. "MODERN LIGHTING TECHNIQUES" by Curtis, an historical documentation of contemporary building construction, showing the application of Curtis' lighting products in a variety of commercial and industrial interiors.

Edwin F. Guth Co.

353. GUTH ELECTRIC CEILINGS — A packet of two page and four page brochures featuring the amazingly different GRATELITE Louver-Diffuser for overall ceiling lighting. Includes full installation, performance and construction data. Actual samples furnished on request.

354. GUTH CHURCH LIGHTING — "Artistic Ecclesiastical Lighting Equipment". Eight page, two color catalog presents the outstanding line of Guth designed Church Luminaires. Styles have been chosen by architectural church authorities to fill most every church lighting need.

355. GUTH INDUSTRIAL FLUORESCENT — "Lighting for Production". This 16 page, two color catalog includes complete information on Guth Industrial Fluorescent Lighting Fixtures. From this catalog an entire factory job—from office to drafting room to factory area—can be specified and ordered.

356. GUTH 1 FOOT WIDE RECESSED TROFFERS FOR 83 CEILING SUSPENSION SYSTEMS—Twelve pages include photos, Coefficients of Utilization, Light Curves, brightnesses and all other pertinent information on one foot wide Lite-Blox troffers. Completely illustrates and describes this most versatile line of troffers—twelve different types of shielding and diffusing media available in 1, 2, 3 and 4 light units, in 2′, 4′, 6′ and 8′ lengths.

357. GUTH INCANDESCENT LIGHTING—"Guth Brascolite Incandescent Luminaires". Seventy-six pages includes Holophane lenses for square and round recessed units, surface and suspended mounted fixtures, nite lights, bed lights, bracket lights, gym lights, outdoor lights and industrial and mercury vapor lights. Specifications, candlepower curves, Coefficients of Utilization, average brightnesses, dimensions, installation information and mechanical construction are given for all products. A most comprehensive catalog for architects and engineers.

358. GUTH SCHOOL LIGHTING DATA—A packet of 2 page and 4 page brochures that include the latest information on both incandescent and fluorescent Guth *Sight Engineered* school fixtures.

359. GUTH 2′ WIDE RECESSED TROFFERS FOR 83 CEILING SUSPENSION SYSTEMS—Six individual pages include installation performance, construction and all pertinent data for models of Guth Recessed Troffers that install into 83 different ceiling suspension systems.

360. GUTH 1958 SWEET'S INSERT—An eight page, two color condensed catalog of all Guth Lighting Fixtures—incandescent and fluorescent.

361. GUTH PRISMOID GRATELITE FOR FLUORESCENT FIXTURES—A packet of two and four page brochures describing the fabulous new PRISMOID Gratelite, the prismatic louver-lens that breathes. Includes photos, Coefficients of Utilization, suggested specifications, technical and descriptive information.

Rohm & Haas

153. ARCHITECTURAL LIGHTING WITH PLEXIGLAS (PL-202). Discusses uses of formed Plexiglas diffusers for fluorescent fixtures, shows various shapes and designs. 1955. 8½ x 11. 8 pages. AIA File No. 31-F.

154. OUTDOOR LIGHTING WITH PLEXIGLAS (PL-242). Shows types of outdoor fluorescent fixtures with acrylic plastic shields and diffusers, typical installations on street, parking lots, airfields, etc. 1955. 8½ x 11. 16 pages.

LOUVERS—ALUMINUM

Kawneer Company

425. KAWNEER SUN CONTROL PRODUCTS. Illustrated booklet showing details and specifications. Photographs illustrate actual applications of the Kawneer Aluminum Canopy, K-Louver and Walk-Way Cover. 1958. AIA File No. 35-P-2.

426. CUSTOM BUILT SUN CONTROL WITH K-LOUVERS. A fully illustrated 8-page booklet containing details, specifications and suggested applications of Kawneer's K-Louver.

LOUVERS, PLASTIC SUN CONTROL

Rohm & Haas

155. DAYLIGHT CONTROL WITH PLEXIGLAS (PL-226a). A guide to the use of daylight louver panels formed from acrylic plastic. Discussion of cut-off angles, illumination levels, recommended locations. Installation details. 1955. 20 pages. AIA No. 26-A-9.

LUMBER

California Redwood Assn.

226. ARCHITECTS' REDWOOD FILE. Compilation of data on redwood for specific use of architects. Includes studies on durability, strength, hardness and shrinkage of redwood as compared to other species, suggested exterior and interior finishes of the product; ideas for use in homes and gardens; description of various grades of redwood. 8½ x 11. 110 pages.

227. STANDARD SPECIFICATIONS FOR GRADES OF CALIFORNIA REDWOOD LUMBER. Nov. '55. Description of all grades of Redwood lumber, including both yard grades and special purpose grades . . . reproduction of grade marks . . . standards of dryness. 6¼ x 3½. 65 pages.

228. STANDARD PATTERNS OF WORKED REDWOOD LUMBER. Pattern Book No. 4. Full sized details of worked Redwood. Jan. 1954. 8½ x 11. 18 pages.

229. REDWOOD NEWS. News summary of the latest and most interesting architectural use of redwood; photographs of use in commercial or artistic or home construction design; datebook reminders for architects, and construction engineers. Quarterly. 8 x 4. 16 pages.

230. EXTERIOR FINISHES. Four pages, full color illustrations. Lists tested brands of natural exterior stains and bleaches. Comes with 4 page supplement listing manufacturers and brands.

231. LANDSCAPE ARCHITECTS FILE. Data and illustrations on use of redwood in yard and garden. 8½ x 11. 70 pages.

232. GARDEN IDEAS BOOKLET (REVISED ANNUALLY). 16 pages with full color illustrations showing newest designs by outstanding landscape architects.

233. WEATHERED REDWOOD. Four pages with full-color illustrations on the low maintenance use of weathered redwood, water repellents and bleaches.

234. REDWOOD GOES TO SCHOOL. A 16-page brochure illustrating how redwood is used in building beautiful, functional schools throughout the United States. Contemporary structures are designed by leading architects.

235. REDWOOD HOME PLANNERS. A 16-page booklet showing newest trends in building homes of redwood.

236. REDWOOD SIDING — APPLICATION. An important guide to the preparation and application of redwood siding, with a discussion of the proper nailing methods to be used for each type.

237. REDWOOD SIDING—PATTERNS. Individual data sheets are available covering the application and nailing methods for: board and batten walls, shiplap, bevel siding, anzac siding and tongue and groove walls.

National Lumber Dealers Assn.

108. NATIONAL DESIGN SPECIFICATION. Allowable stresses for sawn and glued laminated lumber, design formulas, specifications. joints with timber connectors, bolts, lag screws, screws and nails. 1957. 70 pages. 50¢.

109. WOOD STRUCTURAL DESIGN DATA, VOL. 1. Technical data covering design information, formulas, drawings, charts, graphs, and safe load tables for wood beams, columns, plank and laminated floors and roof decks, stud walls, maximum spans for joists and rafters and wood truss design. 1956. 362 pages. $4.00.

110. HOUSE FRAMING DETAILS. Illustrations of conventional methods of assembling structural parts of frame buildings. 1929. 24 pages.

111. HEAVY TIMBER CONSTRUCTION DETAILS. Isometrics and cross sections of methods of framing heavy timber. 1957. 16 pages. 10¢.

112. LUMBER GRADE USE GUIDE. Classification and grades of lumber with recommended grades for typical uses. 1957. 16 pamphlets. $3.00.

113. COMPARATIVE COSTS OF WALLS, PARTITIONS, ROOFS FOR SCHOOL BUILDINGS. Local comparative construction costs. Provision for adjustment to provide for monthly cost variation. 28 pages. 1955.

114. MODERN WOOD SCHOOL. Illustrations of modern wood schools throughout the nation. Discussions of advantages. 24 pages. 1955.

115. LUMBER FROM FOREST TO YOU. History, manufacture, distribution, consumption and progress of the lumber industry. Terminology and list of references included. 1956. 32 pages.

116. THE MASSAPEQUA STORY. Photos and cost data on wood school construction. 1956. 16 pages.

117. ENGINEERED WOOD IN CHURCHES. Shows use of glued-laminated and truss construction for churches. Lists typical designs. 1956. 16 pages.

118. TYPICAL DESIGNS OF TIMBER STRUCTURES. 102 designs. 123 pages.

119. DESIGN AND USE OF TRUSSED RAFTERS. Procedure for fabricating, shipping and assembly. Includes discussion of types of trusses and 12 typical designs. 24 pages. 1957.

120. BETTER HOMES ARE BUILT OF WOOD. Discusses the practical advantages of using lumber and wood products for new home construction and for home remodeling and expansion. Includes about 50 photographs and drawings to illustrate text. 32 pages. 1957.

MARBLE EXTERIOR

Georgia Marble Co.

336. ONE SOURCE-MARBLE AND LIMESTONE. A bulletin describing products of company and its divisions, together with list of sales representatives. 4 pages, 8½ x 11. 1954.

337. VENEER PRODUCTS. Concise descriptive color brochures on Georgia Marble, Tennessee Marble, Alabama Veined Limestone Splitface veneer. Masons' Guide giving technical data on setting, mortars, patterns, etc. 4 brochures. 4 pages each 8½ x 11.

See the **Marble Institute of America** under INTERIOR BUILDING MARBLE.

Vermont Marble Co.

722. EXTERIOR MARBLE FOR VENEER, CURTAIN AND MASONRY WALLS. Illustrations, section details and complete specifications for structural uses of marble. 8 pages. 8½ x 11. AIA No. 8-B-1. 1958.

MARBLE INTERIOR

See the **Marble Institute of America** under INTERIOR BUILDING MARBLE.

Vermont Marble Co.

723. INTERIOR MARBLE. Illustrated folder including specifications and description of VERMARCO TOILET UNITS. List of interior marbles classified according to colors. 4 pages. 8½ x 11. AIA No. 22-A. 1958.

MASTICS

Dicks-Armstrong-Pontius, Inc.

303. CATALOG PAGE—Describes characteristics and uses of DAP Twin-T-Mastic. 8½ x 11. 1 page.

304. CATALOG PAGE—Describes characteristics and uses of DAP Twin-T-Mastic Glazing Tape. 8½ x 11. 1 page.

METAL PRODUCTS

See **Ceco Steel Products Corporation** under DOORS, LATH, FLOOR CONSTRUCTION SYSTEMS, ROOF CONSTRUCTION SYSTEMS, WINDOWS.

See **Overly Mfg. Co.** under ROOFING.

Truscon Steel Division

667. TRUSCON METAL BUILDING PRODUCTS FOR LOW COST SCHOOL CONSTRUCTION. Installation details and description of economical use of products in modular construction. 16 pages. 8½ x 11.

MILLWORK

National Woodwork Manufacturers Assn.

558. STOCK WINDOW, SASH & SCREEN CATALOG. Manufacturing standards, grading rules, popular designs and sizes. 1958. 8 x 11. 12 pages.

559. STOCK DOOR CATALOG. Manufacturing standards, grading rules, popular designs and sizes. 1958.

560. CARE & FINISHING OF WOOD WINDOW UNITS. Timely tips on care and handling of wood windows.

561. CARE & FINISHING OF HARDWOOD FLUSH DOORS. Timely tips on proper care and finishing of flush doors.

562. WOOD WINDOWS. Their development in the exterior of buildings.

563. WOOD WINDOW ADVANTAGES. Explains why wood is most popular and satisfactory material for windows.

564. STANDARD DOOR GUARANTEE. Statement of guarantee by members of NWMA.

MOVING STAIRWAYS

The Peelle Company

583. PEELLE MOTORSTAIRS. This is devoted exclusively to describing and illustrating Peelle Motorstairs, together with Layout space data, and outline specification. 1955. 8½ x 11. 4 pages. AIA No. 33-E-1.

PAINTING

Devoe & Raynolds Company, Inc.

291. INTERIOR WALL FINISHES. General information on Devoe and Raynolds Interior Wall Finishes. 5 x 7. 24 pages.

292. VARNISH. History, uses and general information on Devoe Varnishes. 5 x 7. 23 pages.

293. SCIENCE IN OUR LIVES. General scientific information regarding paint and its connection with the general scientific field today. 5 x 7. 16 pages.

294. HOW PAINT IS MADE. Additional information regarding the manufacture of paint. 5 x 7. 16 pages.

295. SOME PRINCIPLES OF MODERN PAINT DESIGN. General information on the manufacture of paint. 5 x 7. 40 pages.

296. CONDENSATION, BLISTERING, PEELING. Specific information on how to combat it. 8½ x 11. 11 pages.

297. ARCHITECTS SPECIFICATIONS FOR PAINTING AND FINISHING. Complete specifications for painting and finishing new and old surfaces. 8½ x 11. 35 pages.

W. P. Fuller & Co.

80. SPECIFICATIONS FOR PAINTING. Specifications for painting and finishing of exterior and interior surfaces; residential, commercial buildings, hospitals, factories, etc. General conditions contract for above and product descriptions. 1957. 8½ x 11. 20 pages. AIA No. 25c.

National Lumber Dealers Assn.

121. HOW TO PAINT YOUR WOOD HOME. Provides data on paints, application, maintenance, moisture control and correction of paint problems. 1957. 24 pages. 25¢.

National Paint, Varnish & Lacquer Assn.

550. CIRCULAR 771. Natural Finishes for Exterior Woods.

551. CIRCULAR 762. Moisture, the Hidden Menace to Homes.

552. CIRCULAR 763. Some Construction Defects Which Permit Water to Menace Homes.

553. CIRCULAR 732. Some Paint Tests on Asbestos Cement Siding Outdoor Painting.

554. HOW TO RESCUE YOUR HOME FROM THE MENACE OF MOISTURE.

555. HOW TO PAINT YOUR WOOD HOME.

Super Concrete Emulsions Ltd.

163. COLORLESS WATER RESISTANT COATING FOR EXTERIOR WALLS. Contains information and technical data on Water Bar, a silicone water repellent for all types of exterior cement and masonry walls. 4 pages. 8½ x 11. AIA No. 7-B-2.

164. DURABLE AND WEATHER RESISTANT COLOR COATING FOR EXTERIOR MASONRY WALLS. Contains information and technical data on Cemelith, a portland cement-base protective coating for cement base and masonry walls. 4 pages. 8½ x 11. AIA No. 25-C-21-22-23.

165. CHROMALITH. Exterior and interior masonry paint. Contains information in regard to uses of plastic type paint.

PANELS

Celotex Corporation

68. CEMESTO DESIGN AND CONSTRUCTION APPLICATION DATA FILE 5500. Complete architectural details of Cemesto Panel curtain wall, roof decks, and partitions for use on steel or wood framing. 1955. 8½ x 11. 52 pages. AIA No. 19-D.

69. BUILD DISTINCTIVE HOUSES WITH CEMESTO PANELS. Comprehensive architectural details for framing walls and roofs of one story houses for proper use of Cemesto Panels. 1955. 8½ x 11. 6 pages.

See **The Dow Chemical Company** under CURTAIN WALLS.

Roddis Plywood Corp.

611. CRAFTWALL FACTORY FINISHED PANELING. Describes styles in which this ¼" product is available and shows room installations in four colors. 6 pages. 8½ x 11.

612. HOW TO INSTALL CRAFTWALL PANELING. Diagrams and instructions give a detailed account of how to install ¼" paneling over old walls, masonry, and in new construction. 12 pages. 8½ x 11.

613. RODDIS HARDWOOD MOLDING AND TRIM. Shows profiles of both contemporary and traditional patterns which are available in Birch, Oak, Walnut, and Mahogany. 4 pages. 8½ x 11.

614. RODDIS FINISHES. Gives properties and illustrates in color a wide selection of finish hues. The uniqueness of the Roddis finishing system for both amateurs and professionals is pointed out. Instructions are also given for using this finish to match woodwork to Craftwall factory finished paneling. 4 pages. 8½ x 11.

United States Plywood Corp.

691. ARCHITECTURAL GRADE WELDWOOD. Contains specifications and standard construction details on installing Architectural Grade Weldwood Plywood. 8½ x 11. 32 pages. Form #1034D.

692. HOW TO USE NOVOPLY. Installation details on the use of Novoply. 20 pages. 8½ x 11. Form #1313C.

PANELS, METAL

United States Plywood Corp.

693. WELDWOOD ARMORPLY. Details of construction and usage of metal faced plywood in commercial and industrial applications. 8½ x 11. 6 pages. Form #1684.

PANELS, PORCELAIN

Davidson Enamel

285. SWEETS ARCHITECTURAL FILE INSERT, 1958 EDITION. Descriptions, illustrations, and detail drawings showing application studies of Double-Wall Panels for curtain wall construction and Facing Panels for new construction or modernization. 20 pages, 8½ x 11.

286. ARCHITECTS FILE OF TYPICAL CONSTRUCTION DETAILS. Complete, recommended and standard specifications for architectural porcelain, plus current design details and descriptions. Also gives minimum and maximum sizes, shapes, etc. 15 pages, 8½ x 11.

287. ARCHITECTURAL PORCELAIN COLOR CHART. Contains imprinted facsimiles of thirty different single colors and ten different two-color effects available in Davidson Architectural Porcelain.

288. FULL COLOR BROCHURE OF INSTALLATIONS. Reproductions of color transparencies of recent Davidson installations. Shows use of Double-Wall Panels in curtain wall construction and Facing Panels in new construction and modernization.

Special fold-out shows use of both panel types in service station construction. Drawings and details included. 10 pages, 8½ x 11.

289. "HOW YOU CAN KNOW IT'S GOOD PORCELAIN". Shows how Davidson Double-Wall Panels and Facing Panels meet requirements for Class AA and Class A porcelain enamel. 4 pages, 8½ x 11.

290. "HOW TO TEST ARCHITECTURAL PORCELAIN QUALITY IN YOUR OWN OFFICE". Provides instructions for conducing "commercial" test for porcelain enamel, as recommended by the Quality Development Committee of the Porcelain Enamel Institute. Picture chart for use in grading porcelain enamel on basis of these tests also included. 4 pages, 8½ x 11.

United States Plywood Corp.

694. WELDWOOD PORC-LIN-PLY. Describes the uses of porcelain-faced plywood panels. Form #1761.

PARTICLE BOARD

Roddis Plywood Corp.

615. TIMBLEND—Six page folder describes properties, and applications including warp-resistant cupboard doors and use as core material for counter tops and storage cabinets.

PARTITIONS

The E. F. Hauserman Company

86. COMPLETE-LINE BROCHURE—Full-color, 12-page brochure incorporating general information and some technical details of each of the many Hauserman Interior Wall Systems applicable in Offices, Hospitals, Schools, Laboratories, and Industrial Plants.

87. HORIZON BROCHURE—Full-color, 6-page brochure featuring Hauserman's completely new interior wall concept which offers flexibility of design, materials and function. Available with or without detailed specifications.

88. ALUMINUM WALL BROCHURE—6-page brochure presents the complete benefit story of Aluminum Walls. The system integrates unique qualities of aluminum as wall material with inherent benefits of Hauserman partitions. Available with or without detailed specifications.

89. DIVIDER-WALL BROCHURE—6-page brochure illustrates Divider-Wall application and product details. Divider-Wall creates individual office rooms for increased efficiency in general office areas.

90. DECORATORS COLOR SELECTOR—Actual color chip deposits of the 150 Hauserman colors with light reflectancy values of each noted.

Holcomb & Hoke Mfg. Co., Inc.

98. DUAL SOUND-RETARDANT FOLDOOR PARTITION FOLDER No. 7213. Specifications and drawings, plan and head details, sound-retardant values. Photo of installation. 8½ x 11. 4 pages.

Johns-Manville Sales Corp.

389. JOHNS-MANVILLE ASBESTOS MOVABLE WALLS. Full color illustrations, descriptions and construction details of J-M Asbestos Movable Walls prepared specifically for architects use. 1957. 8½ x 11. 20 pages.

Mills Company

494. CATALOG NO. 58—OFFICE PARTITIONS. Comprehensive description and data on the various types of Mills Movable Metal Walls. Applications, architectural details, specifications, and technical information. 1958. 8½ x 11. 68 pages.

495. CATALOG NO. 58-T—TOILET COMPARTMENTS. Complete description of the various types of Mills Toilet Compartments, Showers, and Dressing Rooms, Unit Showers and Hospital Cubicles. Construction details, typical layouts, color chart, specifications and technical information. 1958. 8½ x 11. 20 pages.

496. MILLS MOVABLE WALLS FOR SCHOOL BUILDINGS. Detailed floor plans of a modern high school show *how* and *where* Mills Walls are used to keep its interiors permanently efficient. 1958. 8½ x 11. 4 pages.

497. SPACE CONTROL FOR CHANGING NEEDS. A summary of the many advantages achieved through *Space Control* with Mills Movable Walls—as an essential prerequisite of permanent efficiency. 1958. 11 x 11. 4 pages.

Penn Metal Co., Inc.

589. 7 PENMETAL PARTITION SYSTEMS—20-page folder illustrating and describing seven different types of permanent partitions. Gives material and erection specifications and sound transmission loss rating for each. Also includes tables for spacing of supports, maximum partition heights, and fire resistive ratings.

590. NAILABLE STEEL STUD PARTITION SYSTEM—Describes a new system for the low-cost erection of non-bearing partitions. Known as PERMALOCK it consists of nailable steel studs, track and bridging and necessary washers. Collateral materials such as metal lath, gypsum lath or virtually any type of panel can be secured to the studs as simply as to wood ones. A nailing device bites the nail or screw with a grip designed to prevent loosening. Folder includes dimensions and drawings showing method of attaching collateral materials.

591. HUSH CLIP PARTITION SYSTEM—A new partition system, designed to minimize the transmission of sound from room to room. Components—steel track and studs, the new hush clips, pencil rod and metal lath—are illustrated and described. Included are details of the test, by an independent research laboratory, which established a sound loss rating of 56.4 decibels for the partition.

Richards-Wilcox Mfg. Co.

603. FOLDING PARTITION CATALOG No. A-99-R gives details, specifications, etc., on partitions and classroom wardrobes. 64 pages, 8½ x 11, illustrated.

604. FOLDER F-180 STEEL CLASSROOM WARDROBES, shows specifications, details, etc. 10 pages. 8½ x 11. Illustrated. AIA-35-B-4.

605. FOLDER F-186 VERTICAL LIFT WARDROBES, shows specifications, details, etc. 4 pages. 8½ x 11. Illustrated.

606. FOLDER F-191 ALUMINUM FOLDING PARTITIONS, shows specifications, details, etc. 8 pages. 8½ x 11. Illustrated.

607. CATALOG #200. Describes complete line of Electric Operators designed for Commercial and Industrial use. 8 pages.

Sanymetal Products Co.

159. TOILET COMPARTMENTS, SHOWER STALLS, HOSPITAL CUBICLES, CATALOG NO. 95. Illustrates modern toilet room environments, several types of toilet compartments, and shower stalls, and hospital cubicles; complete specifications for each product; details of toilet and shower installation included for guidance of architects and engineers; complete listing of Sanymetal representatives by states and cities for quick reference. 1958. 8½ x 11. Color. 28 pages. AIA File No. 35-H-6.

Unistrut Products Co.

675. No. 902 PARTITIONS FOLDER. New general folder on movable partitions using UNISTRUT Framing. Four-color with color photos of partition installation. 1957. 8½ x 11. 6 pages.

676. No. 903 SWEET'S INSERT ON COLORLINE PARTITIONS. Basic technical data on ColorLine Movable Partitions with specifications and description of features. Four-color photos of partition installations on covers. 1957. 8½ x 11. 8 pages. AIA File No. 35-H-6.

677. No. 910 COLORLINE PARTITION CATALOG. New, complete catalog depicting the custom appearance available at low cost by the use of ColorLine partitions—stresses features such as: Numerous styles and combinations, unlimited freedom of panel, glass and color selection, flexibility, movability, provision

for wiring requirements, and others. Full technical details and specifications. Variety of installation photos incorporated, 4-color, photo covers. 1958. 8½ x 11. 28 pages. AIA File No. 35-H-6.

United States Plywood Corp.

695. WELDWOOD PARTITIONS AND MOVABLE PARTITION PANELS. Contains details and technical data on Weldwood Partitions and Movable Partition Panels. 8½ x 11. 12 pages. Form #1764.

See **Vermiculite Institute** under VERMICULITE PRODUCTS.

PARTITIONS, TOILET

Fiat Metal Mfg. Co.

328. FIAT METAL TOILET PARTITIONS. A complete line of Fiat Metal Toilet Partitions, Dressing Stalls and Cubicles. Catalog No. 570. 1957. 16 pages. AIA. No. 35-H-6.

PIPE COVERING INSULATION

See **The Dow Chemical Company** under INSULATION, LOW TEMPERATURE.

Miracle Adhesives Corp.

517. INSUL-FIL, Combination of High Quality, Specially Treated Thermal Insulating Material and a Scientifically Controlled High Softening Point Petroleum Asphalt to Provide Protection plus Insulation for Underground Steam Distribution Systems. MIRA-DATA SHEET No. 9—8½ x 11. 4 pages and INSUL-FIL TECHNICAL DATA HANDBOOK—8½ x 11. 18 pages.

See **Vermiculite Institute** under VERMICULITE PRODUCTS.

PLASTER

See **Vermiculite Institute** under VERMICULITE PRODUCTS.

PLASTIC, ACRYLIC

Rohm & Haas

156. PLEXIGLAS IN ARCHITECTURE (PL-276). Gives properties and characteristics, installation procedures, fabrication data, and discusses architectural applications of Plexiglas acrylic plastic. 1956. 8½ x 11. 16 pages. AIA No. 24.

PLASTIC LAMINATE

United States Plywood Corp.

696. WESTINGHOUSE MICARTA ARCHITECTS REFERENCE MANUAL. Complete details on Micarta plastic laminate. 8½ x 11. 22 pages. Form #1666.

PLUMBING

Crane Co.

275. AD-2258 COLOR PLANNING FOR BATHROOMS. A 12-page booklet devoted to the Crane Color Game. Illustrates contrasting, harmonizing, and monochromatic colors to use with 7 Crane colors.

276. AD 1927. THE PREFERRED PLUMBING FOR THE MODERN BATHROOM. A booklet showing product in room arrangement. 16 pages.

277. AD 2043. MODERN KITCHEN BOOKLET. Sixteen pages of new kitchen product and room arrangements.

278. AD 1916. QUALITY PLUMBING FIXTURES FOR THE MODERN HOSPITAL. A booklet devoted to hospital product. 8 pages.

279. AD 1813R. QUALITY PLUMBING AND HEATING EQUIPMENT FOR SCHOOLS. A booklet devoted to the listing of product. 16 pages.

Josam Mfg. Co.

412. PRICE LIST PK. Complete price information with illustrations of all Josam products. 1958. 8½ x 11. 80 pages. AIA No. 29-C.

413. MANUAL SP-6. Covers product illustrations, detailed drawings, illustration diagrams of typical swimming pools. 1957. 8½ x 11. 24 pages. AIA No. 35-F-2.

414. MANUAL S. Water hammer cause and cure. 12 pages. 8½ x 11. AIA No. 29-D-8.

415. CLEANOUTS AND ACCESS BOXES. Illustrations, descriptions, dimensional information and application of cleanout plugs and covers. 18 pages. 8½ x 11. 1957. AIA No. 29-C-31.

416. NEW YORK SPECIFICATIONS. A folder covering Josam products which conform to New York State Specifications. 1953. 8½ x 11. 6 pages. AIA No. 29-C.

J. A. Zurn Mfg. Div.

772. BUILDING PLUMBING DRAINAGE PRODUCTS, ROOF TO BASEMENT. BULLETIN No. 56-1. A catalog containing product information relating to the ZURN SYSTEM for supporting wall type plumbing fixtures, roof drains, expansion joints and flashing fittings, floor drains, trap primers, backwater valves, traps, interceptors, greaseptors, oils and solids interceptors, supremo cleanouts, access boxes, inspecdor, hinged units with frame, Shoktrol, high and low pressure, hydrants, wall and post-type, swimming pool equipment, supply and drainage fittings, pipe line strainers—low pressure drop. 12 pages. 8½ x 11. AIA No. 29-C.

773. YOU CAN BUILD IT AND MAINTAIN IT FOR LESS A NEW WAY. Form 1-52. A booklet of practical ideas designed to stimulate thinking about the importance of modern clean restrooms and how their proper planning may influence the overall cost of a building. 1952. 32 pages. 8½ x 11. AIA File No. 28-H-8.

774. BEHIND CLOSED DOORS. Bulletin No. 55. A brochure stressing the importance of off-the-floor plumbing to architects, engineers, contractors and the general public. Traces evolution of restroom design. 1955. 8½ x 5½.

775. ZURN SYSTEM INDEX FOR WALL TYPE FIXTURES. Complete indexing of wall-type fixtures of the leading manufacturers with corresponding recommended Zurn System product numbers. 1955. 8½ x 11. AIA File No. 29-H-8.

776. SHOKTROL. How to arrest water hammer. One page contains dimension, drawings and descriptive data. 8½ x 11.

777. ZURN THINLINE SYSTEM FOR SUPPORTING WALL-TYPE PLUMBING FIXTURES. Announces newly-designed Zurn Systems for supporting off-the-floor closets, urinals, sinks, and specialized equipment. Contains minimum space requirements, roughing-in data, dimensions, specification information, special variations and helpful features and advantages of particular interest to architects and engineers. 1958. 24 pages. 8½ x 11. AIA File No. 29-H-8.

PLUMBING FIXTURES

American Radiator & Standard Sanitary Corp.

204. AMERICAN-STANDARD PLUMBING FIXTURES (CATA. P-55). Products are arranged in functional sequence to simplify selection, with detailed information condensed and clarified through charting. The graphic presentation promotes quick product comparison. 1955. 9 x 11¼. 188 pages.

PLYWOOD

Roddis Plywood Corp.

616. CHARACTERISTICS OF MODERN WOODS. A reference book of most of the known woods describing characteristics and showing approximate flitch costs. Contains a description of newer terms and table of properties of U. S. woods. 8½ x 11. 61 pages.

617. ARCHITECTURAL PLYWOODS BY RODDIS. Illustrates and describes hardwood plywoods. Gives costs and installa-

tion methods. Also illustrates and describes five textured panelings. 12 pages. AIA No. 19-F.

United States Plywood Corp.

697. THE WELDWOOD CATALOG. Complete information on the entire line of Weldwood building materials. 8½ x 11. 48 pages. Form #1640E.

698. WELDWOOD FOR BUSINESS INTERIORS. Ideas on the application of Weldwood products in business and institutional installations. Form #1651.

PRESERVATIVE TREATMENT

National Woodwork Mfgs. Assn.

565. WATER REPELLENT PRESERVATIVE STANDARDS FOR MILLWORK. Statement of water repellent preservative standards for millwork. 1951. 8½ x 11. 4 pages.

PUTTY

Dicks-Armstrong-Pontius, Inc.

305. CATALOG PAGE: Describes products and their applications; DAP Wood Sash and Steel Sash Putties. 8½ x 11. 1 page.

RACKS, STEEL

Unistrut Products Co.

678. NO. 610 RACK CATALOG. New, colorful catalog emphasizing maximum utilization of the cube through use of UNISTRUT—available from Distributors in all principal cities who stock UNISTRUT and offer engineering service. Sections devoted to racks for pallets, skids, automotive parts, die and Bar stock, displays, general storage, and a selection of the numerous miscellaneous applications. Features such as: simple assembly instructions, basic rack designs, etc. 1958. 8½ x 11. 28 pages. AIA File No. 35-i-15.

See **Unistrut Products Co.** under FRAMING, METAL.

RADIATION

Crane Co.

280. CRANE SUNNYBASE RADIANT BASEBOARD, TYPES R AND RC-AD2192—Features and specifications for inconspicuous cast-iron radiant baseboard. The heating that feels like sunshine. 6 pages. AIA File 30-C-44.

281. CRANE SUNNYBASE COPPER TUBE RADIATION—AD2117—Features and specifications for low cost finned-tube baseboard radiation. 6 pages.

282. CRANE SUNNYWALL COPPER RADIATION (Pub. C-102)—High capacity finned-tube radiation for modern buildings. 20 pages.

283. CRANE SUNNYDAY STEEL RADIATION (Pub. C-605)—High capacity steel fin radiation for commercial applications. 28 pages. AIA File No. 30-C-4.

ROOF CONSTRUCTION SYSTEMS

Ceco Steel Products Corporation

247. CECO STEEL ROOF DECK BULLETIN No. 3003-B. Advantages and properties of Ceco steel roof deck with load tables and recommended procedures for welding. 1957. 8½ x 11. 4 pages. AIA No. 17-A.

See **Ceco Steel Products Corporation** under FLOOR CONSTRUCTION SYSTEMS.

ROOF CONSTRUCTION

Celotex Corporation

70. TECHNICAL SERVICE DATA NO. 1. ROOF DECKS. Comparison of spans, weights, U-values, and costs of types of roof decks in common use. 1955. 8½ x 11. 4 pages. AIA No. 4, 10, 13, 37-A.

71. ARCHITECT SPEC. NO. 60, POURED IN PLACE GYPSUM ROOF DECKS. Description and uses, specifications, construction details, and technical data. 1954. 4 pages. 8½ x 11. AIA No. 4-L.

See **The Dow Chemical Company** under INSULATION, LOW TEMPERATURE.

Inland Steel Products

379. MILCOR STEEL ROOF DECK CATALOG No. 240. New eight-page catalog illustrates and describes the product line. Selection of types, materials and gauges available offers the opportunity to choose a deck that meets the job requirements most economically. Outstanding resistance to construction abuse is provided by the coatings offered—Baked Enamel Primer on Bonderized Steel or Ti-Co Galvanized Steel.

See **Overly Mfg Co.** under ROOFING.

Penn Metal Co., Inc.

592. PENMETAL GALVANIZED STEELDEK—4 page folder describing a new steel roof decking or sidewall "skin" material, developed primarily for use with Penmetal LIGHTSTEEL framing. Included are specifications, dimensions, and tables for safe uniform loads and physical and structural properties. Application of the decking to Penn Metal nailable joists is illustrated.

Stran-Steel Corp.

653. ROOF DECKS. 42 pages showing assembly details, cross sections, insulation and properties. Decks conform to specifications of both the A.I.S.I. and the Metal Roof Deck Technical Institute.

See **Vermiculite Institute** under VERMICULITE PRODUCTS.

ROOFING

Armstrong Cork Co.

224. ARMSTRONG ROOF INSULATIONS. Complete description of Armstrong's Corkboard and Temlok (regular and asphalt impregnated) roof insulation with specifications for their application. 1958. 8 pages. 8½ x 11. AIA File No. 37-B-2.

See **Ceco Steel Products Corporation** under ROOFING AND SIDING.

International Nickel Co., Inc.

382. BASIC APPLICATION DATA—MONEL ROOFING SHEET. Gives characteristics and properties, installation procedures, and suggested gauges for principal applications of Monel Roofing Sheet. 1950. 8½ x 11. 4 pages. AIA File No. 12.

383. INSTRUCTIONS FOR THE SOFT SOLDERING OF MONEL ROOFING SHEETS. Characteristics of Monel Roofing Sheet, advantages and limitations of soft soldering, fluxes, surface preparation, the soldering operation and the strengths of soldered joints are covered. Pictured are 21 types of mechanical joints and edge reinforcements usually calling for soft solder as a sealer. Includes tables of weights in available gauges. 1949. 8½ x 11. 4 pages.

Johns-Manville Sales Corp.

390. SPECIFICATION MANUAL JOHNS-MANVILLE BUILT UP ROOFS. Illustrations and detailed and complete specifications of the various J-M Built-Up Roofs prepared specifically for architects. use. 1957. 8½ x 11. 24 pages.

391. JOHNS-MANVILLE ASBESTOS ROOF SHINGLES. Description and color charts of J-M Colorbestos American Colonial and Salem rigid asbestos roof shingles. 1956. 8½ x 11. 4 pages.

392. JOHNS-MANVILLE SEAL-O-MATIC ASPHALT SHINGLES. Description and full-color illustrations of these patented self-sealing asphalt roofing shingles. 1957. 8½ x 11. 6 pages.

National Lumber Dealers Assn.

122. WOOD ROOF DECKS. Photographs, drawings, charts and graphs with structural requirements, insulation values, fire resistance, cost and appearance advantages inherent in wood for roof decking purposes. 1956. 28 pages. 35¢.

National Paint, Varnish & Lacquer Assn.

556. CIRCULAR 765. Roof Coating Manual.

Overly Mfg. Co.

570. OVERLY ARCHITECTURAL METAL PRODUCTS CATALOG. Design details, streamlined specifications and advantages for Overly roofing and skylight systems, curtain walls and spandrels, solar canopies, alumisill, coping, spires and steeples. Includes data on Architectural Alodine finishes for aluminum, new aluminum acoustical band shells, Kaiser geodesic domes, ornamental and specialty products. 30 photos; over 22 typical sections. 16 pages. 8½ x 11. AIA No. 12-C; 12-L; 14-B; 15-P. 1958 Edition.

See **Overly Mfg. Co.** under SPIRES.

ROOFING—DOMES

See **Overly Mfg. Co.** under ROOFING.

ROOFING AND SIDING

Ceco Steel Products Corporation

248. CECOROLL CORRUGATED GALVANIZED STEEL ROOL ROOFING, Bulletin No. 7060. Application instructions giving description, framing details, application drawings. 1957. 8½ x 11. 8 pages.

Johns-Manville Sales Corp.

393. JOHNS-MANVILLE CORRUGATED ASBESTOS TRANSITE. Illustrations, description and construction details on the many uses of this corrugated asbestos building sheet for roofing and siding. 1954. 8½ x 11. 24 pages.

See **Ramset Fastening System** under FASTENINGS.

ROOF INSULATION

Johns-Manville Sales Corp.

394. JOHNS-MANVILLE ROOF INSULATION. Heat transfer charts, specifications for application and description of the various types of J-M Roofinsul fiberboard roof insulation. 1957. 8½ x 11. 8 pages.

ROOF TREATMENTS

Vermont Marble Co.

724. VERMARCO WHITE-ROOF MARBLE ROOFING AGGREGATE. Describe roofing granules, physical properties, application and shows illustrations. 2 page sheet 8½ x 11. AIA No. 23-E.

SCREENS

See **Ceco Steel Products Corporation** under WINDOWS.

SEATS, WATER CLOSET

C. F. Church

73. CATALOG NO. 11—Illustrations of all types of seats for water closets with descriptions and dimensions, phantom views of hinge attachments, U. S. Government types, and accurate colors of seats to match fixture colors of leading manufacturers. 1954. 8½ x 11. 20 pages. AIA No. 29-H-22.

SHEATHING

Celotex Corporation

72. ARCHITECT SPEC. NO. 10, CELOTEX INSULATING SHEATHING. Description, recommended uses, physical properties and application specifications. 1953. 8½ x 11. 4 pages. AIA No. 19-D-3.

Johns-Manville Sales Corp.

395. JOHNS-MANVILLE STRONGBOARD INSULATION BOARD SHEATHING. Illustrations, application details and advantages of this strong, multi-purpose sheathing and sidewall material. 1957. 8½ x 11. 4 pages.

United States Plywood Corp.

699. WELDWOOD PLYSCORD WITH L-1R GLUE. 4 pages. 8½ x 11. Form #153A.

SHOCK ABSORBERS

Josam Mfg. Co.

417. MANUAL S. 12 pages covering the cause and cure for water hammer in supply lines. Complete with illustrations, specifications, installation diagrams, sizing information, piping layouts. 1957. 8½ x 11. AIA No. 29-D-8.

SHOWER BATH FLOORS

Fiat Metal Mfg. Co.

329. FIAT PRECAST FLOORS. Technical data on Fiat precast floors for built up shower stalls of ceramic, plastic or metal tile, marble, plaster, slate, etc. Catalog 57-F. 1957. 8½ x 11. 8 pages. AIA No. 35-H-6.

SHOWER CABINETS

Fiat Metal Mfg. Co.

330. FIAT SHOWER CABINETS. Fiat sanitary leak and rustproofed shower cabinets with precast floors. Fiat precast floors for enclosure with tile, slate, marble, plaster walls, etc. Catalog No. 58. 8½ x 11. 36 pages. AIA No. 35-H-6.

SIDING

See **Ceco Steel Products Corporation,** under ROOFING AND SIDING.

Inland Steel Products

380. MILCOR WALL PANELS CATALOG No. 243. Four-page catalog contains description and specifications on the new Milcor line of panels for use as siding or insulated exterior walls on commercial or industrial buildings. Panels have a vertical ribbed pattern that produces a wall surface with bold shadow lines. Speed of installation provides economies over masonry construction.

Johns-Manville Sales Corp.

396. JOHNS-MANVILLE COLORBESTOS SIDING SHINGLES. Full color illustrations and description of these distinctive king-size asbestos-cement siding shingles. 1957. 8½ x 11. 4 pages.

National Lumber Dealers Assn.

123. WOOD SIDING FOR BUILDINGS. Describes properties of wood siding, types, grades and methods of application. 13 pages.

United States Plywood Corp.

700. WELDWOOD DURAPLY. Weatherproof panels and how to use them. 8½ x 11. 8 pages. Form #1413B.

SILLS

See **Overly Mfg. Co.** under ROOFING.

SKYLIGHTS

See **Overly Mfg. Co.** under ROOFING.

Rohm & Haas

157. DOME SKYLIGHTS OF PLEXIGLAS (PL-301). Contains detailed description of advantages, function, installation and maintenance procedures, code requirements, and daylighting design calculations for prefabricated skylights with acrylic plastic domes. 1957. 8½ x 11. 16 pages. AIA No. 12-J.

SPIRES

Overly Mfg. Co.

571. POINTING TO GOD. Architectural and religious history of church spires and steeples. Covers all great schools of spire and steeple architecture from 6th to 20th century. Treats in detail: modern construction techniques, materials; problems of stress, leakage, and corrosion. Over 35 illustrations. 28 pages. 8½ x 11. AIA No. 12-L.

See **Overly Mfg. Co.** under ROOFING.

STONE

Mo-Sai Associates

785. MO-SAI PRECAST FACING.

STORE FRONTS

American Art Metals Company

193. AMARLITE ALUMINUM STORE FRONTS. New 16 page catalog giving details and specifications for sash, fascia, bulkheads, division bars, corner bars, sills, jambs and various store front mouldings. AIA File No. 26-D.

194. IDEAS FOR STORE EXTERIORS. File of brochures presenting six versions of store front modernization, approached from the standpoint of urban renewal.

See **Davidson Enamel** under PANELS, PORCELAIN.

Kawneer Company

427. KAWNEER STORE FRONTS. 19-page booklet of details and specifications. This illustrates Kawneer's complete line of store front materials. Design applications are also shown with photographs of actual installations. 1958 AIA File No. 26-D.

Mo-Sai Associates

784. FACE-LIFTING MAIN STREET WITH MO-SAI. Special section of a 16-page brochure describes method of matching and contrasting Mo-Sai textures and colors on existing store buildings. Also shows several methods of anchoring Mo-Sai store facings to existing buildings and new construction. 8½ x 11.

United States Plywood Corp.

701. WELDWOOD PORC-LIN-PLY. Describes the uses of porcelain-faced plywood panels. Form #1761.

702. DESIGN MANUAL ON WELDWOOD CURTAIN WALL PANEL. Description and instruction details. 32 pages. 8½ x 11. Form #1720.

STORM SASH

See **Ceco Steel Products Corporation** under WINDOWS.

STRAINERS, PIPELINE

J. A. Zurn Mfg. Co.

778. PIPE LINE STRAINERS. Manual No. 957. Contains complete catalog information and engineering data regarding proper selection and application of Zurn LPD (low pressure drop) pipe line strainers. Covers duplex type (plug, disc, and gate type), sinlex (offset, straight-thru, and multiple basket type), "Y" strainers; and horizontal duplex, vertical and angle special strainers. 12 pages. 8½ x 11.

779. ZURN STREAMLINE FLOW STRAINER. Form 18-ADV. Describes advantages of unrestricted flow strainer design. Contains strainer selection chart. 4 pages. 8½ x 11.

STRUCTURAL CLAY PRODUCTS

Natco Corp.

546. GENERAL CATALOG S-57 NATCO STRUCTURAL CLAY PRODUCTS. 1957. 8½ x 11. 24 pages.

547. NATCO SALT GLAZED SEGMENTILE. For silos and storage bins. 1957. Single sheet. AIA No. 10-B.

Structural Clay Products Institute

621. BONDS & MORTAR IN THE WALL OF BRICK. Complete explanation of decorative and structural bonds in brick and tile masonry. 1950.

622. WATERTIGHTNESS AND TRANSVERSE STRENGTH OF MASONRY WALLS. Bureau of Standards report summary. 1949.

623. CERAMIC VENEER — THE MODERN ARCHITECTURAL TERRA COTTA—CATALOG 58.5. Details of both adhesion and anchor type ceramic veneer, plus specifications and setting techniques for anchored type. 1957.

624. "SCR"* SCHOOL DESIGN CONCEPT FOLDER. Contains information on new, interior load-bearing partition design for low-cost schools of "SCR brick", plus cost study. 1955.

* Reg. U. S. Pat. Off., Pat. Dend., SCPRF.

625. THE FUTURE IS HERE TODAY! Brochure discussing America's ever-increasing need for more schools and the adaptability of clay masonry to minimum budget school designs. 1955.

626. BRICK AND TILE WALLS REDUCE AIR-CONDITIONING LOADS. Cost-cutting advantages of brick and tile for air-conditioned structures. 1954.

627. ESSENTIALS OF GOOD BRICK AND TILE CONSTRUCTION. Emphasizes importance of proper selection and preparation of materials, mortar and workmanship. 1954.

628. COLOR-ENGINEERED FACING TILE. Scientific approach to color-selection of structural facing tile. Contains color specifications for various type installations, as well as actual samples of colors available. 1953.

629. "CV PANELWALL"* — THE PREFABRICATED CERAMIC VENEER CURTAINWALL. Technical information on design, fabrication, installation and performance of new, research-developed, prefabricated curtainwall of ceramic veneer. Complete construction details. 1956. AIA File No. 9-A.

* Reg. T.M., ATCI.

STRUCTURAL FACING TILE

Facing Tile Institute

321. COLOR-ENGINEERED FACING TILE. Scientific approach to color-selection of structural facing tile. Contains color specifications for various type installations, as well as actual samples of colors available. 1953.

322. STRUCTURAL CLAY FACING TILE. Recommended construction practices and a brief description of types, sizes, colors and finishes. 1951.

323. COLOR ENGINEERING WITH FACING TILE. Contains manufacturers' color designations and table showing suggested colors for various installations. 1953.

324. REINFORCED STRUCTURAL FACING TILE MASONRY. Details of various types of reinforced facing tile walls. 1954.

325. STACK BONDS IN STRUCTURAL CLAY FACING TILE. Description of layout and bonding for typical wall sections. 1955.

26. EXTERIOR WALLS OF GLAZED AND UNGLAZED STRUCTURAL FACING TILE. Covers design, specifications and construction details for exterior glazed and unglazed facing tile walls.

27. STRUCTURAL FACING TILE 6" LOAD-BEARING WALLS. Discusses compressive and transverse strength tests as well as resistance to fire and sound resistance.

Kraftile Company

103. GRAPHIC STANDARDS FOR GLAZED TILE. Second edition. Shape charts, construction details, and specifications for glazed structural wall units for Western construction. 1956. 8½ x 11. 33 pages.

SUPPORTS, MECHANICAL AND ELECTRICAL

See **Unistrut Products Co.** under FRAMING, METAL.

SURFACE ANCHORS

Miracle Adhesives Corp.

518. MIRACLE SURFACE ANCHOR BULLETIN No. 3. 8½ x 11. 4 pages.

519. ARCHITECTURAL BULLETIN No. 2.—SURFACE ANCHORS FOR DUCT INSULATION. 8½ x 11. 4 pages.

SWIMMING POOLS

American Olean Tile Co.

28. MANUAL 800—Swimming Pool Construction.

Josam Mfg. Co.

418. CATALOG SP-6. Covers illustrations, specifications and recommendations for supply inlets, outlets, overflow fittings, gutter drains, water level deck pool fittings, etc., and illustration diagrams of typical swimming pools. 1957. 8½ x 11. 24 pages. AIA No. 35-F-2.

TACKBOARDS

United States Plywood Corp.

703. WELDWOOD TACKBOARD. Description and installation details. 2 pages, 3 colors. 8½ x 11. Form #1796.

TERRAZZO

Medusa Portland Cement Company

493. TERRAZZO MADE WITH MEDUSA WHITE PORTLAND CEMENT. 25 full color illustrations of terrazzo work. 1956. AIA No. 23-E. 12 pages.

National Terrazzo & Mosaic Assn.

557. CATALOG AND DESIGN BOOK (3rd edition). 100 color plates of terrazzo and mosaics, 4-color illustrations of finished work. Architectural details, and full technical information on Terrazzo and Mosaics. 1951. 8½ x 11. Price $10.00. 136 pages. Loose leaf metal binder. AIA No. 23-E.

TERMITES

National Lumber Dealers Assn.

124. EXPOSING THE TERMITE. Construction methods for preventing termite damages. 12 pages.

TILE

American Olean Tile Co.

29. BOOKLET 208—Catalog of Tile Products. 32 color, patterns and technical data.

30. BOOKLET 1001—Crystalline Glazes and Scored Tile for Floors and Walls.

31. BOOKLET 600—Tile for Schools and Hospitals.

32. FOLDER 507—Conduct-O-Tile Installations.

33. FOLDER 501—Conduct-O-Tile Instructions and Specifications.

34. BOOKLET 421—New Ideas for Tile in the Home.

35. BOOKLET 260—Harmonizing Color with Bathroom Fixtures.

Cambridge Tile Mfg. Co.

238. NEW 20 PAGE SUNTILE CATALOG. Description of shapes and sizes. Matched color palette of all Suntile colors. Color reproductions of all patterns designed by Max Spivak.

239. SETFAST WALL TILE BROCHURE. General information and specifications for revolutionary new method of installing 1½ sq. ft. of 4¼ tiles at one time.

240. SETFAST CERAMIC MOSAIC BROCHURE. Technical data on installation procedures using Setfast ceramic mosaics mounted on 2 x 1 sheet.

Ceramic Tile Panels, Inc.

253. NEW HORIZONS IN EXTERIOR DESIGN. Lists the four types of ceramic tile curtain wall panels available, with dimensions.

C. F. Church

74. STYLING AND COLOR SCHEME. Complementary color schemes of Church Wall Tile coordinated with (1) American Standard, (2) Crane Co., (3) White Plumbing Fixtures. 1951. 8½ x 11. 4 pages.

75. CHURCH WALL TILE MECHANICS HANDBOOK. 52 page illustrated manual covering wall lay-out, installation, estimating, and dimension drawings. 1954. 5 x 8.

The Dow Chemical Company

320. PLASTIC WALL TILE. (PTS 40A-SM-855).

Kraftile Company

104. Patio Tile. Methods of laying, sizes, patterns, etc. 8½ x 11.

Miracle Adhesives Corp.

520. MIRACLE TILE HANDBOOK.

521. MIRA-DATA SHEET No. 4—Ceramic Tile Cement. 8½ x 11. 4 pages.

522. MIRA-DATA SHEET No. 6—Conductive Ceramic Tile Adhesive. 8½ x 11. 4 pages.

523. ARCHITECTURAL BULLETIN No. 10—CERAMIC TILE CEMENT.

United States Ceramic Tile Co.

679. ROMANY-SPARTAN CERAMIC TILE. Shown herein are the sizes, shapes, physical properties, colors, and textures of current Romany-Spartan Tiles.

680. CAREFREE LIVING WITH TILE. Illustrated with pictures of areas that tile can be applied to in the home. Printed in 1956, 8 x 11, 8 pages.

681. THE TALENTS OF ROMANY-SPARTAN TILE IN SCHOOLS AND COLLEGE BUILDINGS. Illustrated with photographs showing areas in which tile can be applied in schools and colleges for ease of maintenance. 12 pages, full color, 8½ x 11.

Vermont Marble Co.

725. MARKWA THIN MARBLE WALL AND FLOOR TILE. Illustrations of installations and complete specifications. Full color prints of 18 varieties. 8 pages. 8½ x 11. AIA No. 23-N. 1957.

VACUUM CLEANING

Hillyard Chemical Co.

370. Describes Hillyard Hil-Vac wet and dry vacuum. Includes complete specifications.

Multi-Clean Products, Inc.

533. BETTER FLOOR CARE. (Form 1561). Describes complete MULTI-CLEAN line of portable Industrial Vacuum Cleaners for both wet and dry pickup. Includes specifications, capacities and other data to help in selecting right size and model to do the job. Also describes Multi-Clean Floor Machines, Scrubbing Machines, as well as Floor Waxes, Cleaners, Sealers. 8 pages. Illustrated.

Spencer Turbine Co.

641. SPENCER CENTRAL VACUUM CLEANERS, PRODUCERS & SEPARATORS. Bulletin 133. General data on types of centrifugal vacuum producers, primary and secondary separators. Specifications on Stationary vacuum cleaners, and tables showing dimensions, selection of suitable equipment for various sweeper capacities. 1949. 8 pages. 8½ x 11.

642. SPENCER INDUSTRIAL VACUUM CLEANERS. Bulletin 155. Describes and illustrates stationary and portable vacuum cleaners for conveying, collecting and reclaiming wet and dry materials. 1951. 8 pages. 8½ x 11.

643. SPENCER PIPING AND VALVES. Bulletin 116B. Charts and tables to show methods of determining pipe sizes for central vacuum cleaning systems and selection of inlet valves. 1949. 12 pages. 8½ x 11.

644. 132 UNUSUAL USES FOR SPENCER VACUUM. Bulletin 144. Describes more than 100 special applications of vacuum to industrial problems, with many illustrations. 1949. 20 pages. 8½ x 11.

645. SPENCER VACUSLOT. Bulletin No. 153C. Describes and illustrates system which permits cleaning with dry mops and vacuuming of mops. System also may be utilized for boiler cleaning, wet pick-up and vacuuming.

646. HOSPITAL CLEANING WITH SPENCER VACUUM. Bulletin No. 157. Describes installed vacuum cleaning systems and Mop-Vac systems for hospitals. Typical uses illustrated include vacuum cleaning dry mops, conventional hose and tool vacuum cleaning, water pick-up, boiler cleaning and Venetian blind cleaning. Typical system specifications and list of Spencer-equipped hospitals are included.

VENETIAN BLINDS

Hunter Douglas Aluminum Corp.

99. FLEXALUM TWI NIGHTER VENETIAN BLIND COLOR SELECTOR. Contains Flexalum slat samples of all 20 colors, Flexalum tape samples in 15 colors, sample of Flexalum nylon cord and tassel, color chart of designer recommended contrasting or blending colors, square footage chart for computation of venetian blind sizes from inches to feet, features of the Flexalum Twi Nighter Venetian Blind. 5 x 6½.

100. FLEXALUM PRODUCTS SWEET'S CATALOG INSERT. Includes product information, light control and solar radiation studies, information on provisions for installation, specifications for: Flexalum Twi-Nighter Venetian Blinds, Flexalum Aluminum Draw Draperies, Flexalum Audio Visual Venetian Blinds. Available also with pertinent information on Flexalum Aluminum Awnings. 16 pages. 8½ x 11.

101. FLEXALUM TWI-NIGHTER DECORATOR BOOK. Contains color illustrations showing various uses of blinds in room settings, color guide and product information. 20 pages. 8½ x 11.

VENTILATORS

Ammerman Company, Inc.

206. BULLETIN No. 650. AIRXPELER UNDER FLOOR AND OVERHEAD EXHAUST VENTILATION SYSTEMS FOR ELIMINATING CARBON MONOXIDE, WELDING, SOLDERING AND SPOT VENTILATING. Capacity, dimensions and illustrations. 8½ x 11. 4 pages.

Winco Ventilator Co.

745. VENTILATORS FOR USE WITH GLASS BLOCK. Both commercial and residential types. 4 pages.

VENTILATORS, UNIT

American Air Filter Co.

179. BULLETIN No. 650-A1 — HERMAN NELSON AUDITORIUM UNIT VENTILATORS. 1956. 8½ x 11. 8 pages. AIA File No. 30-D-1.

180. BULLETIN No. 3402 — HERMAN NELSON VENTIMATIC SHUTTER. 1951. 8½ x 11. 1 page.

181. BULLETIN 3500—HERMAN NELSON UNIT VENTILATORS. 1958. 8½ x 11. 16 pages.

182. BULLETIN No. 600-S1—HERMAN NELSON UNIT VENTILATORS WITH GERMICIDAL LAMPS. 1951. 8½ x 11. 4 pages.

183. BULLETIN No. 3574 — HERMAN NELSON DRAFT/STOP WALL 1952. 8½ x 11. 2 pages.

184. BULLETIN No. 600-E3—HERMAN NELSON COLOR AND LINOLEUM SELECTION GUIDE. 1958. 8½ x 11. 4 pages.

185. BULLETIN No. 600-A5—HERMAN NELSON RENEWABLE FILTERS. 1954. 8½ x 11. 1 page.

186. BULLETIN No. 625-S1—HERMAN NELSON AMER-VENT. 1953. 8½ x 11. 8 pages.

187. BULLETIN No. 600-S2—HERMAN NELSON UNIT VENTILATORS FILTER INDICATOR. 1955. 8½ x 11. 1 page.

188. BULLETIN No. 600-E5—HERMAN NELSON UNIT VENTILATOR LIGHT/STOP CURTAIN ACCESSORY. 8½ x 11. 1 page.

189. BULLETIN 600-A9—HERMAN NELSON HOT WATER PERIMETER PIPING SYSTEM. 1956. 8½ x 11. 8 pages.

190. BULLETIN 685-A1 — HERMAN NELSON UNIVENT GAS-FIRED UNIT VENTILATOR. 1956. 8½ x 11. 16 pages.

191. BULLETIN 615-A1—HERMAN NELSON ELECTRIC UNIT VENTILATOR. 1957. 8½ x 11. 12 pages.

See **Minneapolis-Honeywell** under AIR CONDITIONING.

VERMICULITE PRODUCTS

Vermiculite Institute

166. STANDARD SPECIFICATIONS FOR VERMICULITE PLASTERING AND FOR VERMICULITE ACOUSTICAL PLASTIC. Covers application of vermiculite plaster base coat to a variety of surface conditions and includes detailed suggestions for how to obtain best results. 1956. 8½ x 11. AIA File No. 21-A-5 and 39-B.

167. SPECIFICATIONS FOR VERMICULITE CONCRETE FLOORS. Concise data on all types of vermiculite floors, including the new vermiculite-sand concrete as a fill over structural floors, as a floor slab over supports on relatively close spacing, and as a slab laid on the ground. 1952. 8½ x 11. AIA File No. 4-E-13.

168. RECOMMENDED BUILDING CODE REQUIREMENTS FOR VERMICULITE PLASTERING, ACOUSTICAL PLASTIC, FIREPROOFING, AND CONCRETE. Building code language and several pages of line drawings make this a convenient reference for officials and agencies responsible for approval of materials and construction or for the writing or revision of building codes. Recommendations are based on standards of the American Standards Assn., American Society for Testing Materials, and Vermiculite Institute. 1953. 8½ x 11.

169. POURED-IN-PLACE VERMICULITE CONCRETE OVER VENTED STEEL ROOF DECKS. Describes a very recent development that permits considerable flexibility in joist spacing and slab thickness. 1954. 8½ x 11. AIA File No. 37B-2.

170. VERMICULITE CONCRETE ROOF DECKS OVER PAPER-BACKED WIRE LATH. Title given to two folders covering steel or concrete joist construction where the joist spacing does not exceed 32 inches on centers. One folder is an alternate designed for regions where temperatures are 50°F. or above during the pouring and curing period. 1954. 8½ x 11. AIA File No. 4-E-13.

171. VERMICULITE LOOSE-FILL BUILDING INSULATION. Describes the properties of the material and how it is installed. Procedures illustrated with typical construction details. Data authenticated by a nationally known technical consultant give potential savings in fuel and summer air-conditioning costs. 1957. 8½ x 11. AIA File No. 37-C-2.

172. DATA ON VERMICULITE CONCRETE PANEL OR SPANDREL WALLS. A kit containing data on the design and fire resistance of machine-applied vermiculite concrete spandrel walls. 1954. 8½ x 11. AIA File No. 4-E-13.

173. VERSATILE VERMICULITE IN MODERN INDUSTRY. Summarizes current industrial uses of vermiculite. 1954. 8½ x 11.

174. VERMICULITE FIRE-RESISTANCE RATINGS FOR PLASTER, ACOUSTICAL PLASTIC, AND CONCRETE. The constructions are described as tested. Included are new assemblies that have proved more economical than earlier types, such as direct-to-steel fireproofing of formed steel floors and roof decks. 38 drawings show fireproofing details for both concrete and steel roof and floor assemblies, columns, beams, girders and trusses, panel or spandrel walls, and solid plaster partitions. 1956. 8½ x 11. File AIA 21-C-1.

175. AN ANALYSIS OF THE FIRE RESISTANCE OF STEEL FLOOR CONSTRUCTIONS PROTECTED ON THEIR UNDERSIDE BY DIRECTLY-APPLIED VERMICULITE ACOUSTICAL PLASTIC. Summarizes tested low-cost floor constructions. Includes recommendations for direct-to-steel fireproofing with vermiculite acoustic of various floor assemblies. 1956. 8½ x 11.

176. DIGEST OF REPORT OF TEST PROGRAM TO DEMONSTRATE THE ADEQUACY OF VERMICULITE CONCRETE AS A HORIZONTAL DIAPHRAGM. This report by a noted consulting structural engineer is of special interest in areas subject to seismic disturbances, where it is of prime importance to determine the ability of roof deck materials to resist lateral forces and to function as a horizontal diaphragm. 1957. 8½ x 11.

WALL BOARDS

Johns-Manville Sales Corp.

397. JOHNS-MANVILLE ASBESTOS FLEXBOARD. Illustrations and description of the many uses of this all-purpose asbestos cement building sheet for home, industry and farm. 1955. 8½ x 11. 12 pages.

398. JOHNS-MANVILLE CEILING PANELS AND WALL PLANK. Full color illustrations, descriptive material on how to build an attractive new room or do over an old one with these decorative J-M Insulating Board products. 1957. 8½ x 11. 8 pages.

399. JOHNS-MANVILLE TRANSITOP. Description and illustrations of the many uses of this insulating structural panel for exterior and interior walls. 1956. 8½ x 11. 36 pages.

WALL COVERINGS

Armstrong Cork Co.

225. ARMSTRONG VINYL PLASTIC SURFACING AND VINYL WALL TILE. Unabridged Architect's Specifications for the specifying and installation of these modern surfacing materials for walls and countertops. Latest edition. 8½ x 11. AIA No. 23-G.

Dodge Cork Company

309. DODGE PANELCORK BROCHURE. Architect's specifications for the specifying and installation of Dodge Panelcork to studding and over plaster. 8½ x 11.

310. DODGE CORK BRICK. Specifications for the specifying and installation of Dodge Cork Brick over all types of interior walls. 8½ x 11. Four pages.

See **Dodge Cork Tackboard** under BULLETIN BOARD (TACKBOARD).

See **The Dow Chemical Company** under TILE.

Mastic Tile Corporation of America

485. MATICO PLASTIC WALL TILE CATALOG. Color plates showing current colors in MATICO Super Deluxe and Deluxe Plastic Wall Tile lines. Includes illustrations of all accessories. 4 pages. 8½ x 11. 1958.

See **United States Ceramic Tile Co.** under TILE.

United States Plywood Corp.

704. WELDWOOD KALISTRON. Contains architectural specifications on the Weldwood Kalistron and Kalitex line of flexible wall covering materials. 8½ x 11. 4 pages. Form #1766.

705. WELDWOOD FLEXWOOD. Contains architectural specifications on Weldwood Flexwood, decorative wall covering. 8½ x 11. 6 pages. Form #1756.

WALL HYDRANTS

Josam Mfg. Co.

419. WALL HYDRANTS. 4 pages. 8½ x 11. Illustrations and descriptions of non-freezing wall hydrants. 1957. AIA. No. 29-D-9.

J. A. Zurn Mfg. Co.

780. HYDRANTS—GROUND & WALL. Manual 54-5. Complete line with wholly new valve seat design. Only piece of literature available on the wide applications and desirability of the use of hydrants, including non-freeze types. Revised 1955. 16 pages. 8½ x 11. AIA File No. 29-D-9.

WALL PANELS, PREFINISHED

Kawneer Company

428. KAWNEER COLOR WALL. Detailed leaflet illustrating the use of Kawneer Color Wall porcelain faced panels.

See the **Mills Company** under PARTITIONS.

Mo-Sai Associates

786. MO-SAI . . . THE FACING WITH A FUTURE. This 16-page brochure treats principal methods of anchoring prefinished Mo-Sai panels on a wide variety of building structures, including steel-frame, poured-in-place concrete, masonry backup, etc. Also includes helpful data on texture and color selections in Mo-Sai. 2 colors, 8½ x 11.

United States Plywood Corp.

706. PREFINISHED WELDWOOD. Includues color illustrations of all panel types plus installation details. 8½ x 11. 24 pages. Form #1707.

WATER HEATERS

Crane Co.

284. LOOK BELOW THE SURFACE—FORM 1755-1055. 24 page booklet illustrates and describes construction features of Crane gas and electric water heaters.

WINDOWS

Andersen Corp.

207. DETAIL CATALOG NO. 581. (Sweets reprint). Installation details, tables of stock sizes with opening dimensions, unit numbers, and other specification data for Andersen Complete Wood Window Units. 1958. 8½ x 11. 40 pages.

208. TRACING DETAIL FILE. A complete file of quarter scale installation details for Andersen Wood window units, also scale elevations and tables of stock sizes with opening dimensions. Includes file folder. AIA No. 16-L.

Ceco Steel Products Corporation

249. CECO STEEL WINDOWS AND SCREENS, BULLETIN No. 1001-N. Catalog illustrating and describing Ceco's architectural steel windows and screens. . . details, specifications and available types and sizes. 1958. 8½ x 11. 36 pages AIA No. 16-E.

250. CECO ALUMINUM WINDOWS AND SCREENS, BULLETIN No. 6013-E. Full data about Ceco's architectural aluminum windows and screens . . . types and sizes, specifications and details. 1958. 8½ x 11. 24 pages. AIA No. 16-E.

251. CECO CURTAINWALLS, BULLETIN No. 1069-B. Details and description of single-story and multi-story steel and aluminum curtainwalls and steel sub-frame and aluminum gridwall systems. Types of panels, safe limit mullion tables and general specifications. 1958. 8½ x 11. 24 pages. AIA No. 17-A.

(Note: Bulletins No. 1069-B, 1001-N, 6013-E and 1040-F are wire bound into one general catalog—No. 1057-D—for the convenience of architects wanting a single manual which will lie flat when opened. AIA Nos. 17-A, 16-E and 16-A.

252. CECO COMMODITY TYPES OF ALUMINUM AND STEEL WINDOWS AND SCREENS, BULLETIN No. 1049-D. Catalog illustrating and describing Ceco's residential windows together with warehouse types of projected windows. Includes details, specifications, available types and sizes. 1958. 8½ x 11. 40 pages. AIA No. 16-E. (Pacific Coast Edition, Bulletin No. 1049-D-PC.)

(NOTE: Bulletin No. 1049-D can be wire-bound into the general catalog No. 1057-D mentioned directly above for the convenience of architects engaged in residential work. If wanted in No. 1057-D, please specify.)

Flour City Ornamental Iron Co.

333. FLOUR CITY METAL WINDOWS. Complete details, specifications and test data on reversible, projected, fixed, hopper, single hung, double hung and folding type windows. 8½ x 11. 24 pages. AIA No. 16E. 1958.

Michael Flynn Mfg. Co.

335. LUPTON WINDOW CATALOG 1958 EDITION AIA FILE 16E. Details and Specifications for Lupton Windows and Doors in aluminum and steel. Tab cut index.

W. P. Fuller & Co.

81. ALUMINUM CASEMENT WINDOWS. Western sizes only. Complete construction and installations details. Charts all sizes and types and gives rough openings for each. Complete specifications. 8½ x 11. Four pages. AIA No. 16E.

Ludman Corporation

458. AUTO-LOK ALUMINUM WINDOW AND PROJECTED WINDOW CATALOG. Describing the operating principle, weathertight features and accessories of a complete line of aluminum awning windows and aluminum projected windows with details, sizes, and specifications. 1958. 8½ x 11. 28 pages.

459. AUTO-LOK WOOD WINDOW CATALOG. With operating principle described. Sizes, details, and specifications. 1957. 8½ x 11. 8 pages.

460. LIGHT CONSTRUCTION CATALOG. Features and technical details of Auto-Lok Aluminum Awning Windows; Windo-Tite Aluminum Awning Windows; Intermediate Projected Windows; Jalousie Windows; Jalousie Doors; Housing Windows; Sliding Glass Doors; Shower Tub Enclosures. 1957. 8½ x 11. 24 pages.

S. H. Pomeroy Co.

595. POMEROY DOUBLE HUNG WINDOWS IN ALUMINUM. 1958. 12 pages. 8½ x 11.

596. POMEROY DOUBLE HUNG WINDOWS IN GALVANIZED STEEL OR STAINLESS STEEL OF COUNTERWEIGHTED OR SPRING BALANCED TYPE. 1958. 12 pages.

Rolscreen Co.

619. PELLA CASEMENT DETAIL FILE. Contains complete set of ¼" scale details for all types of all construction. Details are loose-leaf type in handy file folder. Easy to trace. 1958. 8½ x 11. 18 pages.

620. PELLA MULTI-PURPOSE AND TWINLITE WINDOW DETAIL FILE. Contains details and descriptions of Pella Multi-Purpose and Twinlite Windows. Shows how they can be used as basement, awning or casement windows. 1958. 8½ x 11. 20 pages. AIA No. 16-L.

R. O. W. Sales

597. R-O-W REMOVABLE WOOD WINDOWS WITH NEW LIF-T-LOX BALANCE. Consumer brochure describing features of lift out sash and the new automatic R-O-W Lif-T-Lox Balance. 4 pages. 8½ x 11. 1956.

598. PICTURE WINDOW WOOD GLIDING UNIT. Consumer brochure showing styling features and complete versatility of the popular horizontal sliding R-O-W High-Lite Gliding Window. 4 pages. 8½ x 11. 1955.

599. COMPLETE INSTALLATION INSTRUCTIONS for removable wood double hung window units showing pictorially step by step rules for better window unit installation. Also covers proper insulation, painting and plastering. 16 pages. 7 x 10. 1956.

Truscon Steel Division

668. TRUSCON METAL WINDOWS AND DOORS. 1958 Edition. Description of window products, interior and industrial doors and recommendation for their use, specifications, types and sizes, installation and section details. 8½ x 11. 168 pages.

669. TRUSCON VISION VENT WINDOW WALLS. Brief description, details and specifications. 8½ x 11. 24 pages.

670. ALUMINUM PROJECTED WINDOWS. For use in institutional and commercial buildings. 8 pages of types, sizes, installation details and specfiications. 8½ x 11.

671. ALUMINUM CASEMENTS. For use in residential, institutional and commercial buildings. Complete details and specifications. 8 pages. 8½ x 11.

672. ALUMINUM AWNING WINDOWS, Series 600-A. For use in institutional, commercial and residential buildings. Complete details, hardware and specifications. 12 pages. 8½ x 11.

Winco Ventilator Co.

746. WINDOWS, COMMERCIAL, ARCHITECTURAL PROJECTED, AND RIBBON WINDOWS AND PANEL WALLS. 24 pages.

WINDOWS—ALUMINUM SLIDING

Arcadia Metal Products

210. ARCADIA WINDOW LITERATURE. Shows types and sizes of horizontal sliding sash, aluminum framed, installation details illustrated. Features described. 2 pages. 8½ x 11. SL-110. Oct. '57.

WOOD FINISHES

Hillyard Chemical Co.

371. Complete product information on Seals and Finishes for every requirement. Describes specialized finishes for particular uses. Gives coverage, complete architect spec's, long spec's for application, illustrated.

Multi-Clean Products, Inc.

534. LIQUID PRODUCT SPECIFICATION CHART (Form 3000). Describes Multi-Clean Wood Floor Sealers and Finishes. Gives formulation, coverage, method of application, etc. Includes similar information for products used in preserving and finishing all other common types of floors.

United States Plywood Corp.

707. WOOD FINISHING WITH FIRZITE AND SATINLAC. Instructions on how to finish Weldwood plywood with Firzite and Satinlac. 8½ x 11. 4 pages. Form #1646A.

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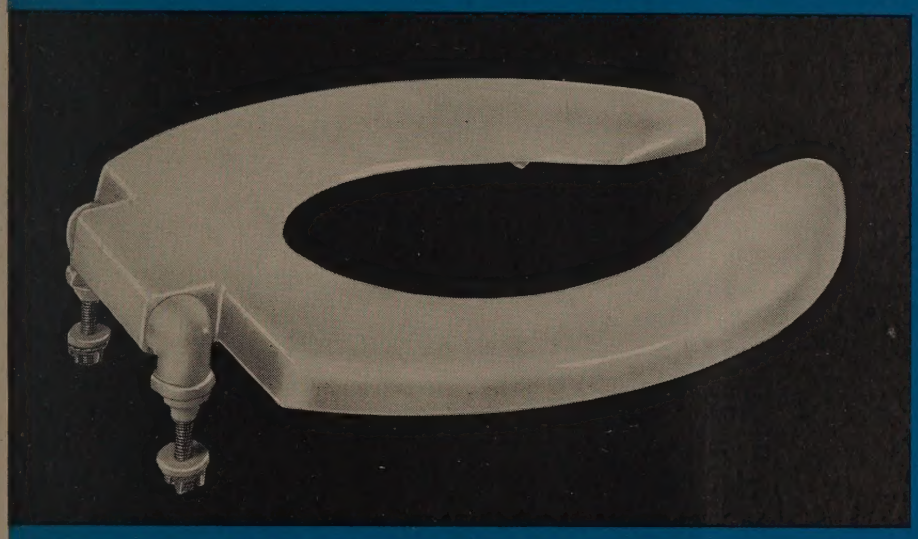
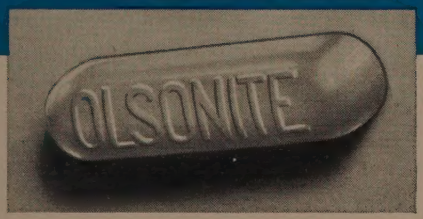
new shockproof 95 Olsonite seat

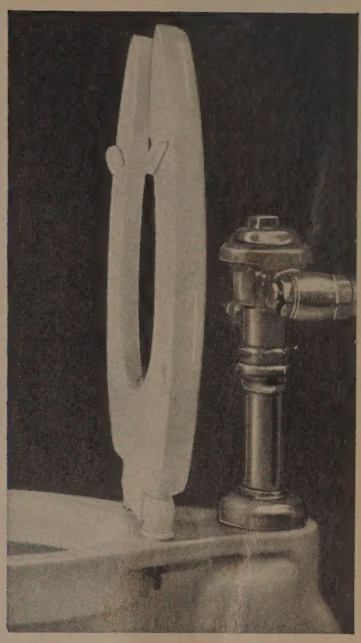


Extra strength No. 95 Olsonite includes lock nuts and washers that allow permanent installation with finger pressure alone.

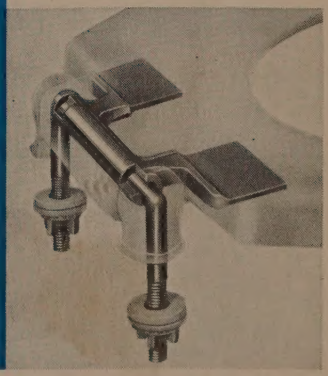
Extra heavy construction with a full 1¼ inches of high impact Olsonite material.



Snap-in vinyl bumpers with the resiliency of rubber have no metal to corrode. Vinyl will not yellow—has 8 to 10 times the life of rubber bumpers.



Concealed check hinge prevents seat from rising more than 11° past vertical. It's standard on all Olsonite No. 95's and 97's.



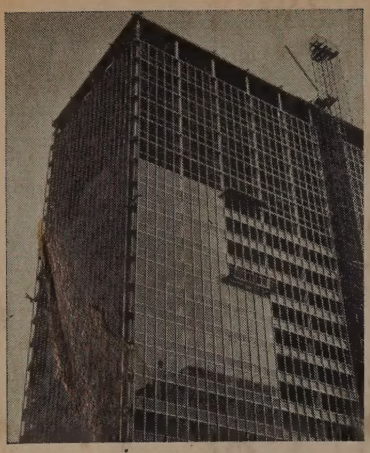
Additional strength is provided by the durable heavy-duty brass reinforcing plate. No wood filling to crack.

SOLID Olsonite SEATS

High impact construction and extra strength design makes it ideal for all non-residential installations

Never before has any manufacturer offered a seat more able to "take it" and remain sanitary and attractive. Extra strength, high impact material has been combined with a tough, shock absorbing, brass reinforcing plate to make the Olsonite No. 95 an incomparable choice for all non-residential installations. The Olsonite 95 will not discolor—it looks sanitary and *stays* sanitary. Available in white or black only, the Olsonite No. 95 is for elongated bowls. No. 97 fits regular bowls.

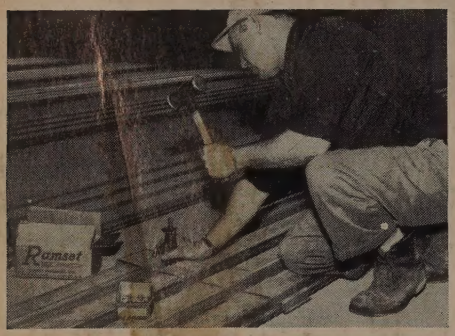
SWEDISH CRUCIBLE STEEL COMPANY, *Plastics Division*
8801 CONANT AVE., DETROIT 11, MICH. 58-A1
ORIGINATORS OF THE SOLID PLASTIC SEAT



9 out of 10 save

by using *Ramset® Products!*

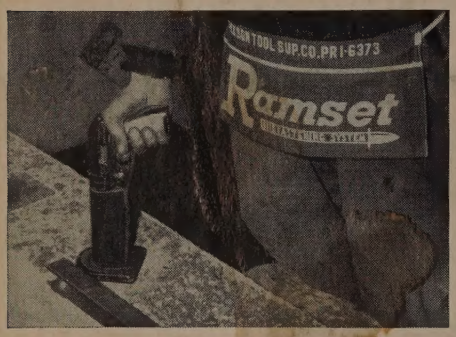
RAMSET® powder-actuated tools and SHURE-SET® hammer-in tools cut fastening time and helped speed completion of this 23-story Cleveland Office building. "Saved from 2 to 15 minutes per fastening, depending on the particular job!", according to general superintendent.



Harrington Electric Co. — electrical contractors —Installed floor conduit, ceiling lights, etc., using both SHURE-SET and RAMSET.

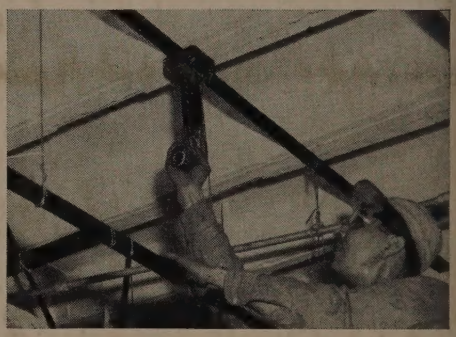
Feldman Bros. Co.–Steamfitters–Used SHURE-SET to anchor radiator chain supports.

Korner Sheet Metal Co. — sheet metal work — Installed air-conditioning ducts with RAMSET and SHURE-SET.

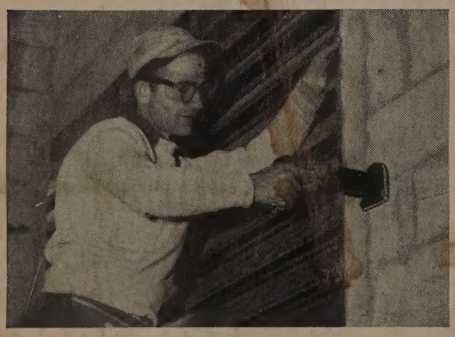


Geo. A. Fuller Co.— general contractors— Anchored angle irons with RAMSET and door bucks with SHURE-SET.

Johnson Service Co.–temperature controls–Twin temperature pipes anchored with SHURE-SET.



Gillen Acoustical Co. — acoustical ceilings — Kickers and hangers installed with RAMSET.



Home & Industrial Heating Co.—air conditioning—Used RAMSET fasteners to hang heavy external louvers.

E. J. Brandt Co., Inc. — perimeter guards — Installed kicker plates and radiator guards with RAMSET.

Builders Structural Steel Corp. —steelwork and valances — Used RAMSET to prevent thru-bolted trusses from swaying.

OLIN MATHIESON CHEMICAL CORPORATION

Ramset

Ramset Fastening System

WINCHESTER-WESTERN DIVISION • OLIN MATHIESON CHEMICAL CORPORATION

12104-C Berea Road

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